ISSN 0714-1904

HEALTH AND SOCIAL SERVICE MANPOWER IN ALBERTA, 1988

Alberta

HEALTH AND SOCIAL SERVICES
DISCIPLINES COMMITTEE

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August, 1989

90-00318/

Foreword

The Alberta Health and Social Services Disciplines Committee is an interdepartmental body of senior officials representing the following government departments: Advanced Education; Career Development and Employment; Health; and Social Services as well as the Professions and Occupations Bureau. The primary function of the Committee is to advise the provincial government on issues relating to health and social service manpower and training. To carry out this mandate, the Committee collects information and data through surveys and monitors manpower supply and demand through ongoing research activities.

The Committee recognizes the need to promote awareness of health and social service manpower concerns. With this in mind, the Committee disseminates manpower information to a number of institutions, organizations and the general public. **Health and Social Service Manpower in Alberta**, an annual publication, provides a range of information on almost forty health and social service occupations in Alberta. The Committee is confident this publication continues to serve as a useful reference.

On behalf of the Alberta Health and Social Services Disciplines Committee, I wish to thank the staff of the professional associations, licensing boards, post-secondary institutions, and employing agencies for providing valuable data to us. Through their support and cooperation we are able to publish **Health and Social Service Manpower in Alberta, 1988**.

Elvin Christenson, F.C.A.
Chairman, Alberta Health and Social
Services Disciplines Committee

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Introduction

This is the eleventh annual publication on health and social service manpower in Alberta. The Alberta Health and Social Services Disciplines Committee produces this report for the purpose of making manpower information available to the public. The report contains information and statistical data on 38 human service occupations for the year ending December 31, 1988. Included are:

- functional definitions;
- information on professional associations/licensing bodies;
- legislation;
- educational programs, enrolments and graduates;
- data on practitioners by geographical location and community size;
- historical and comparative manpower figures.

Scope of Coverage

These are the thirty-eight human service occupations included in this report:

> audiologists/speech pathologists, biomedical engineers, child care workers, child and youth care workers, chiropractors, combined laboratory and x-ray technicians, community health representatives, dental assistants, dental hygienists, dental technicians, dentists, denturists, dietary technologists, dietitians/nutritionists, emergency medical technicians, health record administrators, health record technicians, medical laboratory technologists, medical radiation technologists, occupational hygiene technologists, occupational therapists, ophthalmic dispensers, optometrists, pharmacists, pharmacy assistants, physicians, physical therapists, podiatrists, prosthetists and orthotists, psychiatric nurses, psychologists, public health inspectors, recreational therapists, registered nurses, registered nursing assistants, rehabilitation practitioners, respiratory therapists, social workers.

Child care workers (employed in day care centres) have been added to this year's report. In previous publications, the chapter entitled "Child Care Workers" referred to individuals who provided care and counselling to children and youths with behavioural and/or emotional problems. Information on this group is now found in the chapter "Child and Youth Care Workers."

The health care and social service sector contains numerous occupations. However, due to the constraints of time and other resources, it is not possible for all occupations to be reported in this publication. Two criteria have been used in the decision to include an occupation: legislative recognition and the existence of training programs. Only occupations with professional legislation and/or formal training programs in Alberta (or inter-provincial training agreements) are included.

As in previous reports, data on personnel is presented by geographic distribution. Census divisions are used for this purpose. As of 1986, the number of census divisions increased from 15 to 19. As a result, census division data before and after 1986 are not comparable. In conjunction with this change, the boundaries of the Census Metropolitan Areas of Calgary and Edmonton increased to include a number of surrounding areas.[1] Manpower information for the two Census Metropolitan Areas is presented separately from their respective census divisions in order to provide a clearer picture of the urban and non-urban distribution of personnel. The map on the following page shows the census divisions and the major urban centres within each division.

In addition to the distribution of personnel by census divisions, the distribution of personnel by community size is also included for each occupation.

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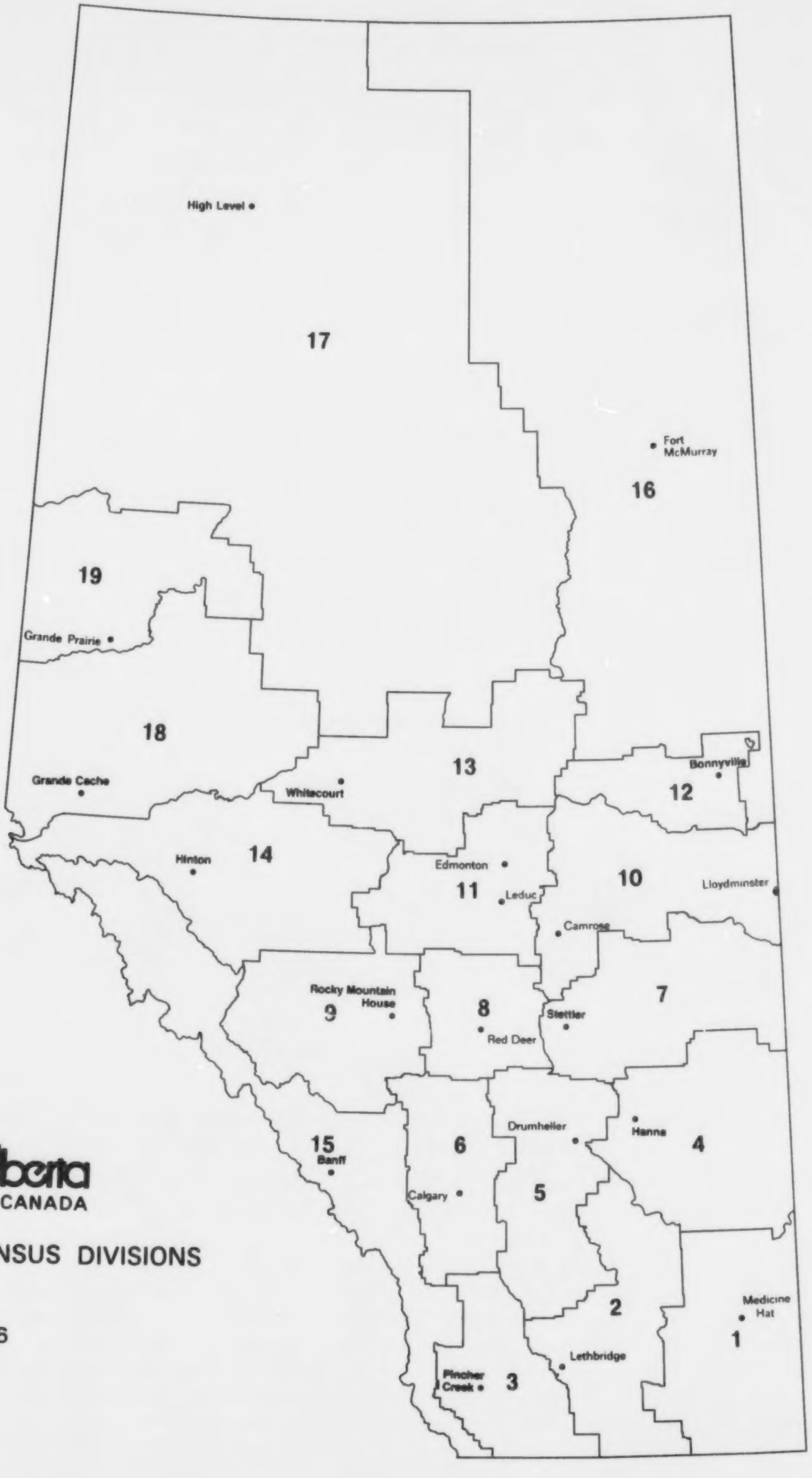
[1] [The Census Metropolitan Area of Edmonton includes the cities of Edmonton, Fort Saskatchewan, Leduc, St. Albert, and Spruce Grove; the towns of Beaumont, Bon Accord, Calmar, Devon, Drayton Valley, Gibbons, Morinville, Redwater, and Stony Plain; the villages of Breton, Entwistle, Legal, New Sarepta, Thorsby, Wabamun, and Warburg; the summer villages of Betula Beach, Edmonton Beach, Golden Days, Itaska Beach, Kapasiwin, Lakeview, Point Allison, Seba Beach, and Sundance Beach; the municipal district of Sturgeon #90; and the counties of Leduc #25, Parkland #31 and Strathcona #20.] [The Census Metropolitan Area of Calgary includes the cities of Airdrie and Calgary; the towns of Cochrane and Crossfield; the villages of Beiseker and Irricana; the summer village of Chestermere Lake; the municipal district of Rocky View #44, and Sarcee Indian Reserve #145.]


High Level
17
Fort McMurray
16
19
Grande Prairie
18
Grande Cache
Whitecourt
13
Bonnyville
12
Hinton
14
Edmonton
11
Leduc
10
Lloydminster
Camrose
Rocky Mountain House
9
8
Red Deer
Stettler
7
Drumheller
Hanna
4
15
Banff
6
Calgary
5
2
Medicine Hat
1
Lethbridge
Pincher Creek
3

Alberta
CANADA

CENSUS DIVISIONS

1986

Information Sources

The principal sources of information and data contained in this report are:

1. The 1980 edition of the **Canadian Classification and Dictionary of Occupations**;
2. Current professional legislation;
3. Provincial professional associations or licensing bodies for health and social service occupational groups (two of the 38 groups have no professional association or licensing body);
4. Surveys of health and social service personnel working in Alberta conducted by the Alberta Health and Social Services Disciplines Committee;
5. Survey of health and social service education programs in Alberta conducted by Alberta Advanced Education;
6. Reports published by Health and Welfare Canada; and
7. Population estimates provided by the Alberta Bureau of Statistics, and municipal census data provided by Alberta Municipal Affairs.

The definitions in the **Canadian Classification and Dictionary of Occupations** have been used for most disciplines in this publication. In some cases, definitions were obtained from professional statutes or other sources. Information on legislation was obtained from provincial statutes governing the professions.

About half of the manpower data appearing in the report were obtained from professional associations and licensing bodies, particularly in cases where registration with a professional association or licensing body was mandatory. To obtain this information, a survey of professional associations and licensing bodies was conducted by the Alberta Health and Social Services Disciplines Committee in December 1988. For the remaining manpower groups, the survey of employers of health and social service personnel conducted on March 31, 1988 by the Alberta Health and Social Services Disciplines Committee, was used as the data source.

Alberta Health and Social Service Education Programs Inventory December 1988 was the source of information on basic education programs contained in this publication. The inventory was compiled by Alberta Advanced Education through a survey of human services educational programs in Alberta's post-secondary institutions.

In order to put its manpower situation in a regional context, Alberta's personnel-to-population ratios for selected occupations were compared to those for Western Canada (Manitoba, Saskatchewan, Alberta and British Columbia combined) where similar information from these other jurisdictions was available. Health and Welfare Canada provided this information.

Data Limitations

Accuracy is considered of utmost importance in data collection. However, there can be deficiencies in the sources of information. Some of these limitations are:

1. Some professional association registries included retired, honorary or associate members who may not have full practice rights. Where possible, such members were excluded for the purpose of this publication.
2. The number of practitioners is likely to be underestimated for those occupational groups where registration is not mandatory in order to practise. For such groups, the survey of employers of health and social service personnel was used as the source of data. Manpower statistics from the survey of employers indicate the number of personnel practising at the time of the survey. The registration data from professional associations or registration bodies provide manpower data about the potential number of personnel in the province; the actual number practising is generally lower than the total registered.

3. The dates for the data will vary depending on the source. March 31 is the date of the annual employment survey. The end of the membership year is used as the date for the data from professional associations. For most, but not all, groups this date is December 31.

Manpower Situation in 1988

Since 1979, the Alberta Health and Social Services Disciplines Committee has conducted manpower surveys of employers of health and social service personnel in Alberta. Thirteen surveys have been completed since then, two annually from 1979 to 1981, and one in each year since 1982. The Committee's thirteenth employer survey was conducted on March 31, 1988. Data were sought on 81 occupational groups from 5,386 employers, with a response rate of 98.4 percent. Day care centres were included for the first time in the annual employer survey. Data were collected for centre directors and child care workers employed in day care centres throughout the province.

Based on the March 31, 1988 survey, there were 76,330 persons employed in the health and social service sector which represented 62,364 "full-time equivalent" established positions.[1] At the time of the survey, there were 1,999 vacant "full-time equivalent" positions, representing an average vacancy rate of 3.2 percent. There were 8,209 resignations during the period from April 1, 1987 to March 31, 1988 representing an average turnover rate of 13.2 percent during the 12-month period prior to the survey.

As of March 31, 1988 the occupational groups experiencing the highest vacancy rates were:

• Occupational Therapists	12.0%
• Dental Hygienists	11.3%
• Registered Nurses — Psychiatric	10.0%
• Physical Therapists	8.5%
• Registered Nurses — Physicians' Offices/Clinics	8.1%
• Psychological Assistants	7.9%
• Rehabilitation Practitioners	7.1%
• Public Health Inspectors	6.8%
• Community Health Representatives	6.6%
• Pharmacists	6.3%

The manpower groups with the highest turnover rates from April 1, 1987 to March 31, 1988 were:

• Child Care Workers (in day care)	25.7%
• Personal Care Attendants	24.5%
• Physical Therapists	20.4%
• Child and Youth Care Workers (excluding day care)	20.4%
• Rehabilitation Practitioners	20.1%
• Recreational Therapists	19.8%
• Occupational Therapists	19.8%
• Dental Assistants (trained on the job)	18.8%
• Registered Nurses — Critical Care, Intensive Care	17.1%
• Dietitians	17.1%

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[1] "Full-time equivalent" established positions were calculated by adding data on full-time employment and vacancies to data on part-time employment and vacancies which had first been converted to represent full-time employment.

Training of Health and Social Service Personnel

In 1987-88, Alberta had a total of 133 educational programs to train health and social service personnel. These training programs were found in 27 post-secondary educational institutions, hospitals, and cancer treatment centres in the province. In a few areas where there were no educational programs in the province, Alberta had inter-provincial training agreements with institutions outside the province.

Alberta Advanced Education, on behalf of the Alberta Health and Social Services Disciplines Committee, publishes annually a report entitled **Alberta Health and Social Service Education Programs Inventory**. The 1987-88 edition of this publication contains the following information on health and social service training programs in Alberta:

- Location and length of training programs;
- Number of applicants;
- First-year enrolment quotas;
- Actual enrolments; and
- Number of graduates.

Readers who wish to obtain more information in these areas should consult this publication.

Format of the Publication

The format of this report remains the same as previous editions. The 38 occupational groups are organized alphabetically by chapter. Each chapter contains sections on:

- The functional definition and statistical highlights of the occupational group;
- Professional association, licensing authority, and regulatory legislation;
- The number of personnel, their geographical distribution, and historical and (in some cases) comparative manpower data; and
- Basic education programs.

There is a breakdown by specialty for three of the occupational groups: dentists, physicians, and registered nurses.

The table on pages 7 and 8 provides summary information for the 38 occupational groups.

Summary Information

	Number of Registered/ Practising Personnel	Personnel -to- Population Ratio	Legislation	Number of Training Programs	Number of Graduates
Audiologists and Speech Pathologists	332	1:7,214		2	38
Biomedical Engineers	17	1:140,882		3	2
Child Care Workers	5,776	1:415		10	284
Child and Youth Care Workers	1,576	1:1,520		3	76
Chiropractors	328	1:7,302	X	—	—
Combined Laboratory and X-Ray Technicians	306	1:7,827	X	1	12
Community Health Representatives	97	1:24,691		1	15
Dental Assistants	2,090	1:1,146	X	3	171
Dental Hygienists	709	1:3,378	X	1	37
Dental Technicians	186	1:12,876	X	1	18
Dentists	1,258	1:1,904	X	1	44
Denturists	202	1:11,856	X	1	15
Dietary Technologists	253	1:9,466		2	51
Dietitians/Nutritionists	379	1:6,319	X	3	34
Emergency Medical Technicians	1,342	1:1,785	X	4	129
Health Record Administrators	135	1:17,741		1	15
Health Record Technicians	347	1:6,902		1	13
Medical Laboratory Technologists	2,408	1:995		3	132
Medical Radiation Technologists	1,263	1:1,896	X	4	67
Occupational Hygiene Technologists	113	1:21,195		1	4
Occupational Therapists	425	1:5,635		2	76
Ophthalmic Dispensers	386	1:6,205	X	2	55
Optometrists	215	1:11,140	X	—	—

Summary Information continued

	Number of Registered/ Practising Personnel	Personnel -to- Population Ratio	Legislation	Number of Training Programs	Number of Graduates
Pharmacists	2,078	1:1,153	X	1	101
Pharmacy Assistants	562	1:4,262		1	38
Physical Therapists	1,115	1:2,148	X	2	53
Physicians	4,092	1:585	X	2	183
Podiatrists	24	1:99,792	X	—	—
Prosthetists and Orthotists	28	1:85,536		—	—
Psychiatric Nurses	1,132	1:2,116	X	2	48
Psychologists	1,174	1:2,040	X	10	147
Public Health Inspectors	132	1:18,144	X	—	—
Recreational Therapists	278	1:8,615		3	43
Registered Nurses	21,699	1:110	X	25	1,272
Registered Nursing Assistants	7,225	1:331	X	2	179
Rehabilitation Practitioners	1,350	1:1,774		8	121
Respiratory Therapists	478	1:5,010	X	2	60
Social Workers	2,585	1:926	X	6	404

Audiologists and Speech Pathologists

I. Overview

Definition: Audiologists

Provide diagnostic evaluation and rehabilitative services and conduct research related to hearing. Administer air and bone conduction and other audiometric tests and examinations to determine hearing efficiency. Coordinate audiometric results with medical, social, behavioural and other diagnostic data. Evaluate total response pattern and acoustic tests to differentiate between organic and non-organic hearing loss. Plan, direct and participate in counselling, speech-reading and other rehabilitation programs. Act as consultants to educational, medical and other professional groups. Conduct research in physiology, pathology, biophysics and psychophysics of auditory system, if required. Design and develop clinical and research procedures and apparatus, if required.

Speech Pathologists

Diagnose and treat speech, language and voice disorders and perform related research. Administer tests and observe patient to diagnose nature of disorder and to evaluate degree of impairment. Plan and conduct remedial exercises and programs to correct stuttering, abnormal articulation and other disorders. Provide speech training for patient with communication problems caused by cerebral palsy, surgical removal of larynx, hearing deficiencies or other impairments. Plan individual or group therapy in rehabilitation of communication disorders. Counsel and guide language-handicapped individuals and their families, teachers or employers. Act as consultants to educational, medical, dental and other professional groups. Conduct research related to development of diagnostic and treatment techniques and procedures or design of apparatus.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

There were 482 audiologists and speech pathologists registered with the Speech and Hearing Association of Alberta (SHAA) in 1988.[1] Of these, 328 had full practice rights, 125 were students and 29 were inactive or did not meet all membership requirements. However, registration is not compulsory for audiologists and speech pathologists. According to a survey of health and social service employers conducted by the Alberta Health and Social Services Disciplines Committee, there were 27 audiologists and 305 speech pathologists practising in Alberta in 1988.[2]

According to this survey, approximately 38 percent of these professionals were employed by local school boards and in schools for the handicapped. Another 28 percent worked in acute care hospitals and 25 percent were employed by health units.[3]

Ninety-three percent of the audiologists and 68 percent of the speech pathologists were employed in the Census Metropolitan Areas of Calgary and Edmonton. The provincial audiologist-to-population ratio was 1:88,704 and the provincial speech pathologist-to-population ratio was 1:7,852 in 1988.

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[1] Source: Speech and Hearing Association of Alberta. Number of speech and hearing personnel registered with the SHAA as of October 31, 1988.

[2] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1988," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[3] Ibid.

II. Professional Association and Legislation Information

a) **Licensing, Registration, or Certification Authority:**

None.

b) **Professional Association:**

Speech and Hearing Association of Alberta
Box 86, Main Post Office
Edmonton, Alberta
T5J 2G9

President: Ms. Marguerite Hartwig

President Elect: Ms. Kathy Ryan

c) **Legislation:**

There is no legislation regulating audiologists and speech pathologists in Alberta at present.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF PRACTISING AUDIOLOGISTS, ALBERTA, 1988

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	0	57,400	—
2 (Lethbridge)	0	115,800	—
3 (Pincher Creek)	0	35,400	—
4 (Hanna)	0	12,300	—
5 (Drumheller)	0	38,700	—
6 (Calgary excluding CMA)	0	38,058	—
7 (Stettler)	0	40,900	—
8 (Red Deer)	0	119,200	—
9 (Rocky Mountain House)	0	16,300	—
10 (Camrose)	0	79,100	—
11 (Edmonton excluding CMA)	0	30,227	—
12 (Bonnyville)	0	45,800	—
13 (Whitecourt)	0	55,300	—
14 (Hinton)	0	24,800	—
15 (Banff)	0	22,900	—
16 (Fort McMurray)	0	48,700	—
17 (High Level)	0	50,600	—
18 (Grande Cache)	0	12,500	—
19 (Grande Prairie)	2	72,100	1:36,050
Census Metropolitan Area (CMA) of Calgary	13	693,142[3]	1:53,319
Census Metropolitan Area (CMA) of Edmonton	12	785,673[3]	1:65,473
PROVINCIAL TOTAL	**27**	**2,395,000**	**1:88,704**

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1988," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "(Preliminary) Population Estimates by Census Division, Alberta, 1988," Alberta Bureau of Statistics, June 1989.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

TABLE 1B
COMMUNITY BREAKDOWN OF PRACTISING AUDIOLOGISTS, ALBERTA, 1988

Community by Population Size	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	13	693,142[3]	1:53,319
Census Metropolitan Area (CMA) of Edmonton	12	785,673[3]	1:65,473
10,000 to 69,999			
Camrose	0	12,968	—
Fort McMurray	0	34,949	—
Grande Prairie	1	26,648	1:26,648
Lethbridge	0	60,610	—
Lloydminster	0	10,201	—
Medicine Hat	0	42,290	—
Red Deer	0	54,839	—
Wetaskiwin	0	10,103	—
5,000 to 9,999			
Bonnyville	0	5,575	—
Brooks	0	9,464	—
Crowsnest Pass	0	6,912	—
Drumheller	0	6,366	—
Edson	0	7,323	—
High River	0	5,096	—
Hinton	0	8,846	—
Innisfail	0	5,535	—
Lacombe	0	6,110	—
Okotoks	0	5,666	—
Olds	0	5,004	—
Peace River	1	6,355	1:6,355
Ponoka	0	5,473	—
Rocky Mountain House	0	5,261	—
Slave Lake	0	5,611	—
St. Paul	0	5,128	—
Stettler	0	5,147	—
Taber	0	6,382	—
Vegreville	0	5,276	—
Whitecourt	0	6,126	—
Under 5,000	0	540,921	—
PROVINCIAL TOTAL	**27**	**2,395,000[4]**	**1:88,704**

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1988," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[4] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

TABLE 1C
GEOGRAPHIC DISTRIBUTION OF PRACTISING SPEECH PATHOLOGISTS, ALBERTA, 1988

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	10	57,400	1:5,740
2 (Lethbridge)	14	115,800	1:8,271
3 (Pincher Creek)	6	35,400	1:5,900
4 (Hanna)	1	12,300	1:12,300
5 (Drumheller)	4	38,700	1:9,675
6 (Calgary excluding CMA)	3	38,058	1:12,686
7 (Stettler)	3	40,900	1:13,633
8 (Red Deer)	15	119,200	1:7,947
9 (Rocky Mountain House)	0	16,300	—
10 (Camrose)	8	79,100	1:9,888
11 (Edmonton excluding CMA)	2	30,227	1:15,114
12 (Bonnyville)	5	45,800	1:9,160
13 (Whitecourt)	6	55,300	1:9,217
14 (Hinton)	2	24,800	1:12,400
15 (Banff)	1	22,900	1:22,900
16 (Fort McMurray)	3	48,700	1:16,233
17 (High Level)	2	50,600	1:25,300
18 (Grande Cache)	2	12,500	1:6,250
19 (Grande Prairie)	10	72,100	1:7,210
Census Metropolitan Area (CMA) of Calgary	85	693,142[3]	1:8,155
Census Metropolitan Area (CMA) of Edmonton	123	785,673[3]	1:6,388
PROVINCIAL TOTAL	**305**	**2,395,000**	**1:7,852**

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1988," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "(Preliminary) Population Estimates by Census Division, Alberta, 1988," Alberta Bureau of Statistics, June 1989.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

TABLE 1D
COMMUNITY BREAKDOWN OF PRACTISING SPEECH PATHOLOGISTS, ALBERTA, 1988

Community by Population Size	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	85	693,142[3]	1:8,155
Census Metropolitan Area (CMA) of Edmonton	123	785,673[3]	1:6,388
10,000 to 69,999			
Camrose	3	12,968	1:4,323
Fort McMurray	2	34,949	1:17,475
Grande Prairie	8	26,648	1:3,331
Lethbridge	8	60,610	1:7,576
Lloydminster	1	10,201	1:10,201
Medicine Hat	10	42,290	1:4,229
Red Deer	12	54,839	1:4,570
Wetaskiwin	2	10,103	1:5,052
5,000 to 9,999			
Bonnyville	1	5,575	1:5,575
Brooks	3	9,464	1:3,155
Crowsnest Pass	0	6,912	—
Drumheller	2	6,366	1:3,183
Edson	1	7,323	1:7,323
High River	2	5,096	1:2,548
Hinton	1	8,846	1:8,846
Innisfail	0	5,535	—
Lacombe	0	6,110	—
Okotoks	0	5,666	—
Olds	0	5,004	—
Peace River	1	6,355	1:6,355
Ponoka	2	5,473	1:2,737
Rocky Mountain House	0	5,261	—
Slave Lake	0	5,611	—
St. Paul	2	5,128	1:2,564
Stettler	2	5,147	1:2,574
Taber	1	6,382	1:6,382
Vegreville	1	5,276	1:5,276
Whitecourt	0	6,126	—
Under 5,000	32	540,921	1:16,904
PROVINCIAL TOTAL	**305**	**2,395,000[4]**	**1:7,852**

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1988," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[4] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

TABLE 2
SELECTED MANPOWER STATISTICS FOR AUDIOLOGISTS AND SPEECH PATHOLOGISTS IN ALBERTA, 1986, 1987, AND 1988

	1986	1987	1988
Number of Practising Personnel[1]	330	346	332
% Change in Number of Practising Personnel	1.5%	4.8%	–4.0%
Population (Alberta)[2]	2,375,100	2,377,700	2,395,000
% Change in Population	1.1%	0.1%	0.7%
Personnel-to-Population Ratios:			
– Alberta	1:7,197	1:6,872	1:7,214

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[1] Sources: "Health and Social Service Personnel Working in Alberta, March 31," 1986, 1987 and 1988 editions, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

IV. Educational Programs

There is a four-year baccalaureate degree in speech pathology offered at the University of Alberta. The program produced 36 graduates in 1987-88. This program includes courses in speech pathology and audiology. However, graduates from the program only qualify as speech pathologists. Audiologists require training at the graduate level.

A master's program in speech pathology was introduced in 1986-87 at the University of Alberta. The program produced its first two graduates in 1987-88.

TABLE 3
EDUCATIONAL PROGRAMS FOR AUDIOLOGISTS AND SPEECH PATHOLOGISTS IN ALBERTA[1]

	1985-86	1986-87	1987-88
A. BACCALAUREATE PROGRAM			
University of Alberta			
Bachelor of Science in Speech Pathology			
(Program Length: 4 years)			
Enrolments:			
1st Year	Pre Professional Year		
2nd Year	35	35	35
3rd Year	31	35	34
4th Year	24	31	36
Graduates:	24	30	36
B. MASTER'S PROGRAM			
University of Alberta			
Master of Science in Speech Pathology[2]			
(Program Length: 2 years)			
Enrolments:			
1st Year	—	3	3
2nd Year	—	—	3
Graduates:	—	—	2

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[1] Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1988.

[2] The master's program commenced in 1986-87.

Biomedical Engineers

I. Overview

Definition: "Biomedical Engineering — usually either graduate engineers, mostly in electrical engineering with graduate training and experience in the biomedical sciences; or graduate engineers working in the field of biomedical engineering. Can play the following roles: provide engineering supervision of the technical staff, manage educational programs for others in the staff, efficient use of equipment, provide engineering consultation, improvement or innovative design of equipment, conduct research."[1]

(Source: **Development in Biomedical Engineering in Canada — Manpower and Governmental Activities.** Ottawa, Ontario: Health Manpower Directorate, Department of National Health and Welfare, 1973; pp. 2-3).

There were 17 biomedical engineers who resided in Alberta and registered with the Canadian Medical and Biological Engineering Society in 1988.[2] Biomedical engineers located in the Census Metropolitan Areas of Calgary and Edmonton accounted for 88 percent of the total. The provincial biomedical engineer-to-population ratio was 1:140,882 in 1988.

II. Professional Association and Legislation Information

a) Licensing, Registration, or Certification Authority:

None.

b) Professional Association:

Canadian Medical and Biological Engineering Society
c/o National Research Council
Building M-50, Room 164
Ottawa, Ontario
K1A 0R6

President: Dr. Robert Kearney

Past-President: Dr. Walter Zingg

c) Legislation:

There is no legislation regulating biomedical engineers in Alberta at present.

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[1] The term, "biomedical engineer," is often used much more loosely to cover physicists, computing scientists, and other specialists and technicians, working in the biomedical field, many of whom are not qualified as engineers. In this chapter, this broader interpretation is used.

[2] Source: Canadian Medical and Biological Engineering Society. Number of biomedical engineers registered with the Canadian Medical and Biological Engineering Society and residing in Alberta as of December 31, 1988.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF REGISTERED BIOMEDICAL ENGINEERS, ALBERTA, 1988

Census Division (Major Urban Centre)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	0	57,400	—
2 (Lethbridge)	0	115,800	—
3 (Pincher Creek)	0	35,400	—
4 (Hanna)	0	12,300	—
5 (Drumheller)	0	38,700	—
6 (Calgary excluding CMA)	0	38,058	—
7 (Stettler)	0	40,900	—
8 (Red Deer)	0	119,200	—
9 (Rocky Mountain House)	0	16,300	—
10 (Camrose)	0	79,100	—
11 (Edmonton excluding CMA)	0	30,227	—
12 (Bonnyville)	0	45,800	—
13 (Whitecourt)	0	55,300	—
14 (Hinton)	0	24,800	—
15 (Banff)	0	22,900	—
16 (Fort McMurray)	1	48,700	1:48,700
17 (High Level)	0	50,600	—
18 (Grande Cache)	0	12,500	—
19 (Grande Prairie)	1	72,100	1:72,100
Census Metropolitan Area (CMA) of Calgary	3	693,142[3]	1:231,047
Census Metropolitan Area (CMA) of Edmonton	12	785,673[3]	1:65,473
PROVINCIAL TOTAL	**17**	**2,395,000**	**1:140,882**

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[1] Source: Canadian Medical and Biological Engineering Society. Number of biomedical engineers registered with the Canadian Medical and Biological Engineering Society and residing in Alberta as of December 31, 1988.

[2] Source: "(Preliminary) Population Estimates by Census Division, Alberta, 1988," Alberta Bureau of Statistics, June 1989.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

TABLE 1B
COMMUNITY BREAKDOWN OF REGISTERED BIOMEDICAL ENGINEERS, ALBERTA, 1988

Community by Population Size	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	3	693,142[3]	1:231,047
Census Metropolitan Area (CMA) of Edmonton	12	785,673[3]	1:65,473
10,000 to 69,999			
Camrose	0	12,968	—
Fort McMurray	1	34,949	1:34,949
Grande Prairie	1	26,648	1:26,648
Lethbridge	0	60,610	—
Lloydminster	0	10,201	—
Medicine Hat	0	42,290	—
Red Deer	0	54,839	—
Wetaskiwin	0	10,103	—
5,000 to 9,999			
Bonnyville	0	5,575	—
Brooks	0	9,464	—
Crowsnest Pass	0	6,912	—
Drumheller	0	6,366	—
Edson	0	7,323	—
High River	0	5,096	—
Hinton	0	8,846	—
Innisfail	0	5,535	—
Lacombe	0	6,110	—
Okotoks	0	5,666	—
Olds	0	5,004	—
Peace River	0	6,355	—
Ponoka	0	5,473	—
Rocky Mountain House	0	5,261	—
Slave Lake	0	5,611	—
St. Paul	0	5,128	—
Stettler	0	5,147	—
Taber	0	6,382	—
Vegreville	0	5,276	—
Whitecourt	0	6,126	—
Under 5,000	0	540,921	—
PROVINCIAL TOTAL	**17**	**2,395,000[4]**	**1:140,882**

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[1] Source: Canadian Medical and Biological Engineering Society. Number of biomedical engineers registered with the Canadian Medical and Biological Engineering Society and residing in Alberta as of December 31, 1988.

[2] Source: "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[4] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

TABLE 2
SELECTED MANPOWER STATISTICS FOR BIOMEDICAL ENGINEERS IN ALBERTA, 1986, 1987, AND 1988

	1986	1987	1988
Number of Registered Personnel[1]	17	17	17
% Change in Number of Registered Personnel	-10.5%	0.0%	0.0%
Population (Alberta)[2]	2,375,100	2,377,700	2,395,000
% Change in Population	1.1%	0.1%	0.7%
Personnel-to-Population Ratios:			
– Alberta	1:139,712	1:139,865	1:140,882
– Western Canada[3]	1:105,257	—	—

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[1] Source: Canadian Medical and Biological Engineering Society. Number of biomedical engineers registered with the Canadian Medical and Biological Engineering Society and residing in Alberta as of December 31 of the year indicated.

[2] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

[3] Source: Ratio for the provinces of Manitoba, Saskatchewan, Alberta and British Columbia combined derived from, **Health Personnel in Canada — 1987**. Ottawa, Ontario: Department of National Health and Welfare, December 1988.

IV. Educational Programs

The Department of Applied Sciences in Medicine at the University of Alberta offers graduate programs for physicists, engineers, computing scientists and other specialists. In addition, master's and doctoral degree programs are available to students registered in the engineering or science faculties but carrying out their research in the Faculty of Medicine. In 1987-88, two students graduated from the master's programs and none from the doctoral program.

TABLE 3
EDUCATIONAL PROGRAMS FOR
BIOMEDICAL ENGINEERS IN ALBERTA[1]

	1985-86	1986-87	1987-88
A. MASTER'S PROGRAMS University of Alberta Master of Science offered by the Faculties of Engineering and Science (Program Length: variable)			
Enrolments:	9	1	4
Graduates:	6	1	2
University of Alberta Master of Science offered by the Department of Applied Sciences in Medicine (Program Length: variable)			
Enrolments:	5	1	8
Graduates:	2	0	0
PROVINCIAL TOTAL Number of M.Sc. Programs: 2			
Graduates:	8	1	2
B. DOCTORAL PROGRAM University of Alberta (Program Length: variable)			
Enrolments:	5	4	5
Graduates:	2	1	0

---

[1] Source: Department of Applied Sciences in Medicine, University of Alberta, Edmonton, May 1989.

Child and Youth Care Workers

I. Overview

Definition: Provide care and counselling to children, youth and their families. The child or youth with emotional and/or behavioral problems is often the main focus of attention. The worker establishes a relationship with the child or youth and engages him in activities planned to teach competence and responsibility. Child and youth care includes the following tasks: shape the child or youth's environment to support his development of skills; manage a child or youth's maladaptive behavior; mediate between children, youth and their families as appropriate; assess and communicate the progress of children and youth; provide individual and group activities in a living or community setting; teach living skills and independent skills. Settings include the family home, school, residential facilities, group homes, hospitals, foster homes and community environments.

(Source: Alberta Family and Social Services)

Since registration with the Child Care Workers' Association of Alberta is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1988 by the Alberta Health and Social Services Disciplines Committee, was used as an alternative source of manpower information.

There were 1,576 child and youth care workers practising in Alberta in 1988.[1] Those employed in the Census Metropolitan Areas of Calgary and Edmonton accounted for 68 percent of the total. The provincial child care worker-to-population ratio was 1:1,520 in 1988. Since child care workers primarily work with children and adolescents, the adjusted provincial child care worker-to-population (5-17 years) ratio was 1:299 in 1988.[2]

II. Professional Association and Legislation Information

a) Licensing, Registration, or Certification Authority:

None.

b) Professional Association:

Child Care Workers' Association of Alberta
6920 – 128 Avenue
Edmonton, Alberta
T5C 1S7

President: Mr. Jeff Reid

c) Legislation:

There is no legislation regulating child and youth care workers in Alberta at present.

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1988," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: Estimate of (5 – 17) year old population in Alberta (as of June 1, 1988) derived from "Alberta Population Growth, Third Quarter, 1988," Alberta Bureau of Statistics, December 1988.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF PRACTISING CHILD AND YOUTH CARE WORKERS, ALBERTA, 1988

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	29	57,400	1:1,979
2 (Lethbridge)	72	115,800	1:1,608
3 (Pincher Creek)	23	35,400	1:1,539
4 (Hanna)	0	12,300	—
5 (Drumheller)	33	38,700	1:1,173
6 (Calgary excluding CMA)	23	38,058	1:1,655
7 (Stettler)	9	40,900	1:4,544
8 (Red Deer)	73	119,200	1:1,633
9 (Rocky Mountain House)	14	16,300	1:1,164
10 (Camrose)	22	79,100	1:3,595
11 (Edmonton excluding CMA)	26	30,227	1:1,163
12 (Bonnyville)	43	45,800	1:1,065
13 (Whitecourt)	1	55,300	1:55,300
14 (Hinton)	2	24,800	1:12,400
15 (Banff)	5	22,900	1:4,580
16 (Fort McMurray)	50	48,700	1:974
17 (High Level)	30	50,600	1:1,687
18 (Grande Cache)	0	12,500	—
19 (Grande Prairie)	49	72,100	1:1,471
Census Metropolitan Area (CMA) of Calgary	582	693,142[3]	1:1,191
Census Metropolitan Area (CMA) of Edmonton	490	785,673[3]	1:1,603
PROVINCIAL TOTAL	**1,576**	**2,395,000**	**1:1,520**

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1988," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "(Preliminary) Population Estimates by Census Division, Alberta, 1988," Alberta Bureau of Statistics, June 1989.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

TABLE 1B
COMMUNITY BREAKDOWN OF PRACTISING CHILD AND YOUTH CARE WORKERS, ALBERTA, 1988

Community by Population Size	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	582	693,142[3]	1:1,191
Census Metropolitan Area (CMA) of Edmonton	490	785,673[3]	1:1,603
10,000 to 69,999			
Camrose	16	12,968	1:811
Fort McMurray	22	34,949	1:1,589
Grande Prairie	35	26,648	1:761
Lethbridge	65	60,610	1:932
Lloydminster	0	10,201	—
Medicine Hat	29	42,290	1:1,458
Red Deer	56	54,839	1:979
Wetaskiwin	26	10,103	1:389
5,000 to 9,999			
Bonnyville	1	5,575	1:5,575
Brooks	0	9,464	—
Crowsnest Pass	0	6,912	—
Drumheller	0	6,366	—
Edson	0	7,323	—
High River	12	5,096	1:425
Hinton	2	8,846	1:4,423
Innisfail	4	5,535	1:1,384
Lacombe	7	6,110	1:873
Okotoks	0	5,666	—
Olds	1	5,004	1:5,004
Peace River	1	6,355	1:6,355
Ponoka	0	5,473	—
Rocky Mountain House	14	5,261	1:376
Slave Lake	7	5,611	1:802
St. Paul	7	5,128	1:733
Stettler	0	5,147	—
Taber	0	6,382	—
Vegreville	0	5,276	—
Whitecourt	1	6,126	1:6,126
Under 5,000	198	540,921	1:2,732
PROVINCIAL TOTAL	**1,576**	**2,395,000[4]**	**1:1,520**

---

[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1988," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[4] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

TABLE 2
SELECTED MANPOWER STATISTICS FOR CHILD AND YOUTH CARE WORKERS IN ALBERTA, 1986, 1987, AND 1988

	1986	1987	1988
Number of Practising Personnel[1]	1,312	1,428	1,576
% Change in Number of Practising Personnel	-3.4%	8.8%	10.4%
Population (Alberta)[2]	2,375,100	2,377,700	2,395,000
% Change in Population	1.1%	0.1%	0.7%
Personnel-to-Population Ratios:			
– Alberta	1:1,810	1:1,665	1:1,520

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[1] Sources: "Health and Social Service Personnel Working in Alberta, March 31," 1986, 1987 and 1988 editions, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

IV. Educational Programs

Grant MacEwan Community College, Lethbridge Community College, and Mount Royal College each offer a two-year child and youth care worker diploma program. The three programs produced 76 graduates in 1987-88.

TABLE 3
EDUCATIONAL PROGRAMS FOR CHILD AND YOUTH CARE WORKERS IN ALBERTA[1]

	1985-86	1986-87	1987-88
CHILD AND YOUTH CARE WORKER DIPLOMA			
Grant MacEwan Community College (Program Length: 2 years)			
Enrolments:			
1st Year	83	72	66
2nd Year	48	47	40
Graduates:	33	39	41
Lethbridge Community College (Program Length: 2 years)			
Enrolments:			
1st Year	28	33	30
2nd Year	16	16	17
Graduates:	12	15	12
Mount Royal College (Program Length: 2 years)			
Enrolments:			
1st Year	36	51	63
2nd Year	20	31	43
Graduates:	17	17	23
PROVINCIAL TOTAL			
Number of Training Programs: 3			
Graduates:	62	71	76

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[1] Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1988.

Child Care Workers

I. Overview

Definition: Supervise rest periods, play activities, developmental exercises, feeding and hygiene of preschool children at a day care centre.

Greet children and help them to settle into the physical environment. Feed infants and supervise meals and snacks for older children. Diaper infants and direct/assist older children in the use of toilets and personal hygiene. Organize and supervise groups of children in activities such as games, storytelling, arts and crafts and playground exercises. Spend time with individual children, entering into conversation, encouraging self- expression, and promoting inquisitiveness and self- direction. Maintain positive attitude and consistent behaviour, and show loving care. In keeping with practices acceptable to recognized standards and parent's expectations, administer required medications, contact parents when child is ill, and guide a child's behaviour in a manner which preserves and enhances self-esteem and reinforces socially acceptable conduct. Supervise rest and naptimes. Report concerns about a child and a child's developmental progress to the parent and/or supervisor-in-charge. Attend meetings and workshops as required.

(Source: Alberta Family and Social Services)

The survey of health and social service personnel working in Alberta conducted on March 31, 1988 by the Alberta Health and Social Services Disciplines Committee was used as the source of manpower information.

The survey found that there were 5,776 child care workers practising in Alberta in 1988.[1] Child care workers employed in the Census Metropolitan areas of Calgary and Edmonton accounted for 78 percent of the total. The provincial child care worker-to-population ratio was 1:415 in 1988.

Since child care workers work with children, the adjusted provincial child care worker-to-population (0-5 years) ratio was 1:42 in 1988.

II. Professional Association and Legislation Information

a) Licensing, Registration or Certification Authority:
None.

b) Professional Association:
There is no one association which is recognized as representing all child care workers.

c) Legislation:
There is no legislation regulating child care workers in Alberta at present.

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1988," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF PRACTISING CHILD CARE WORKERS, ALBERTA, 1988

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	110	57,400	1:522
2 (Lethbridge)	236	115,800	1:491
3 (Pincher Creek)	29	35,400	1:1,221
4 (Hanna)	7	12,300	1:1,757
5 (Drumheller)	88	38,700	1:440
6 (Calgary excluding CMA)	99	38,058	1:384
7 (Stettler)	32	40,900	1:1,278
8 (Red Deer)	185	119,200	1:644
9 (Rocky Mountain House)	27	16,300	1:604
10 (Camrose)	92	79,100	1:860
11 (Edmonton excluding CMA)	29	30,227	1:1,042
12 (Bonnyville)	34	45,800	1:1,347
13 (Whitecourt)	51	55,300	1:1,084
14 (Hinton)	11	24,800	1:2,255
15 (Banff)	34	22,900	1:674
16 (Fort McMurray)	63	48,700	1:773
17 (High Level)	64	50,600	1:791
18 (Grande Cache)	19	12,500	1:658
19 (Grande Prairie)	76	72,100	1:949
Census Metropolitan Area (CMA) of Calgary	1,868	693,142[3]	1:371
Census Metropolitan Area (CMA) of Edmonton	2,622	785,673[3]	1:300
PROVINCIAL TOTAL	**5,776**	**2,395,000**	**1:415**

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1988," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "(Preliminary) Population Estimates by Census Division, Alberta, 1988," Alberta Bureau of Statistics, June 1989.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

TABLE 1B
COMMUNITY BREAKDOWN OF PRACTISING CHILD CARE WORKERS, ALBERTA, 1988

Community by Population Size	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	1,868	693,142[3]	1:371
Census Metropolitan Area (CMA) of Edmonton	2,622	785,673[3]	1:300
10,000 to 69,999			
Camrose	21	12,968	1:618
Fort McMurray	38	34,949	1:920
Grande Prairie	40	26,648	1:666
Lethbridge	153	60,610	1:396
Lloydminster	35	10,201	1:291
Medicine Hat	86	42,290	1:492
Red Deer	120	54,839	1:457
Wetaskiwin	17	10,103	1:594
5,000 to 9,999			
Bonnyville	7	5,575	1:796
Brooks	37	9,464	1:256
Crowsnest Pass	6	6,912	1:1,152
Drumheller	19	6,366	1:335
Edson	4	7,323	1:1,831
High River	26	5,096	1:196
Hinton	7	8,846	1:1,264
Innisfail	4	5,535	1:1,384
Lacombe	16	6,110	1:382
Okotoks	19	5,666	1:298
Olds	32	5,004	1:156
Peace River	6	6,355	1:1,059
Ponoka	11	5,473	1:498
Rocky Mountain House	27	5,261	1:195
Slave Lake	27	5,611	1:208
St. Paul	15	5,128	1:342
Stettler	10	5,147	1:515
Taber	15	6,382	1:425
Vegreville	0	5,276	—
Whitecourt	12	6,126	1:511
Under 5,000	476	540,921	1:1,136
PROVINCIAL TOTAL	**5,776**	**2,395,000[4]**	**1:415**

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1988," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[4] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

TABLE 2
SELECTED MANPOWER STATISTICS FOR CHILD CARE WORKERS IN ALBERTA, 1986, 1987, AND 1988

	1986	1987	1988
Number of Practising Personnel[1]	—	—	5,776
% Change in Number of Practising Personnel	—	—	—
Population (Alberta)[2]	2,375,100	2,377,700	2,395,000
% Change in Population	1.1%	0.1%	0.7%
Personnel-to-Population Ratios:			
– Alberta	—	—	1:415

IV. Educational Programs

Training in early childhood development is offered in one-year certificate programs, two-year diploma programs and a four-year baccalaureate program.

Certificate programs are offered at Alberta Vocational Centre — Lac La Biche, Keyano College, Lakeland College, Lethbridge Community College, Medicine Hat College, and Mount Royal College; diploma programs are offered at Grande Prairie Regional College, Grant MacEwan Community College, Mount Royal College, and Red Deer College. Baccalaureate-level training is available as a specialization in early childhood education through the Faculty of Education at the University of Alberta and the University of Calgary.

In 1987-88, there were 170 certificate graduates and 105 diploma graduates.

Data on enrolments and graduates from the university degree programs is unavailable at this time.

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[1] Sources: "Health and Social Service Personnel Working in Alberta, March 31, 1988," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

TABLE 3
EDUCATIONAL PROGRAMS FOR CHILD CARE WORKERS IN ALBERTA[1]

	1985-86	1986-87	1987-88
A. CERTIFICATE PROGRAMS IN EARLY CHILDHOOD DEVELOPMENT			
Alberta Vocational Centre Lac La Biche (Program Length: 36 weeks)			
Enrolments:	10	14	13
Graduates:	5	9	11
Keyano College (Program Length: 1 Year)			
Enrolments:	57	68	42
Graduates:	20	14	16
Lakeland College (Program Length: 1 Year)			
Enrolments:[2]	201	25	143
Graduates:	24	23	26
Lethbridge Community College (Program Length: 1 Year)			
Enrolments:[2]	350	347	499
Graduates:	10	20	20
Medicine Hat College (Program Length: 1 Year)			
Enrolments:	29	29	23
Graduates:	20	18	17
Mount Royal College Program Length: (Certificate: 1 year) (Diploma: 2 years)			
Enrolments:			
1st Year	116	115	132
2nd Year	39	41	34
Graduates:			
Certificate	40	34	37
Diploma	31	29	20

---

[1] Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1988.

[2] Figures include part-time registrations and may include enrolment data for distance education courses or evening classes.

TABLE 3 continued
EDUCATIONAL PROGRAMS FOR CHILD CARE WORKERS IN ALBERTA[1]

	1985-86	1986-87	1987-88
B. DIPLOMA PROGRAMS IN EARLY CHILDHOOD DEVELOPMENT			
Grande Prairie Regional College (Program Length: 2 years)			
Enrolments:			
1st Year	310	258	293
2nd Year	20	14	18
Graduates:			
Certificate[2]	12	—	—
Diploma	16	14	17
Grant MacEwan Community College (Program Length: 2 years)			
Enrolments:[3]			
1st Year	503	566	528
2nd Year	76	85	93
Graduates:	61	73	49
Red Deer College (Program Length: 2 years)			
Enrolments:			
1st Year	111	135	144
2nd Year	53	44	36
Graduates:			
Certificate	52	62	43
Diploma	43	32	19
Mount Royal College — See entry in Section A above.			

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[1] Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1988.

[2] Certificate program is no longer offered.

[3] Enrolment figures may include part-time students and those in off-campus locations.

Chiropractors

I. Overview

Definition: A chiropractor practises within the branch of the healing arts concerned with the restoration and maintenance of human health by the chiropractic adjustment or manipulation of the spinal column and other articulations of the body and includes the use of x-ray and other analytical instruments, therapies and diagnostic procedures.

(Source: The Chiropractic Profession Act, S.A. 1984, Ch. C9.1)

There were 359 chiropractors who registered with the College of Chiropractors of Alberta (CCA) in 1988. Of these, 328 were active members residing in Alberta, 23 were practising in another jurisdiction and eight were retired.[1] Fifty-seven percent of active chiropractors in Alberta were located in the Census Metropolitan Areas of Calgary and Edmonton. The number of active chiropractors registered in Alberta increased by 3.8 percent between 1986 and 1988 while the provincial population grew by 0.8 percent during the same period. The provincial chiropractor-to-population ratio was 1:7,302 in 1988.

II. Professional Association and Legislation Information

a) Professional Association/Registration Body:

College of Chiropractors of Alberta
516, 10235 – 101 Street
Edmonton, Alberta
T5J 3G1

President: Dr. Grayden J. Bridge

b) Legislation:

Under the authority of the Chiropractic Profession Act, all individuals who wish to practise as chiropractors must register on an annual basis with the College of Chiropractors of Alberta (CCA).

The CCA is responsible for registration, maintaining professional discipline and practice review. The Universities Coordinating Council has the authority to approve faculties of chiropractic and determine equivalencies for registration purposes.

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[1] Source: College of Chiropractors of Alberta. Number of chiropractors registered with the CCA as of December 31, 1988.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF REGISTERED CHIROPRACTORS, ALBERTA, 1988

Census Division (Major Urban Centre)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	10	57,400	1:5,740
2 (Lethbridge)	28	115,800	1:4,136
3 (Pincher Creek)	5	35,400	1:7,080
4 (Hanna)	1	12,300	1:12,300
5 (Drumheller)	6	38,700	1:6,450
6 (Calgary excluding CMA)	9	38,058	1:4,229
7 (Stettler)	5	40,900	1:8,180
8 (Red Deer)	25	119,200	1:4,768
9 (Rocky Mountain House)	3	16,300	1:5,433
10 (Camrose)	13	79,100	1:6,085
11 (Edmonton excluding CMA)	4	30,227	1:7,557
12 (Bonnyville)	3	45,800	1:15,267
13 (Whitecourt)	5	55,300	1:11,060
14 (Hinton)	4	24,800	1:6,200
15 (Banff)	2	22,900	1:11,450
16 (Fort McMurray)	2	48,700	1:24,350
17 (High Level)	1	50,600	1:50,600
18 (Grande Cache)	0	12,500	—
19 (Grande Prairie)	12	72,100	1:6,008
Census Metropolitan Area (CMA) of Calgary	95	693,142[3]	1:7,296
Census Metropolitan Area (CMA) of Edmonton	93	785,673[3]	1:8,448
Location Unknown	2	—	—
PROVINCIAL TOTAL	**328**	**2,395,000**	**1:7,302**

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[1] Source: College of Chiropractors of Alberta. Number of chiropractors registered with the CCA and residing in Alberta as of December 31, 1988. Excludes inactive, honorary, and retired members.

[2] Source: "(Preliminary) Population Estimates by Census Division, Alberta, 1988," Alberta Bureau of Statistics, June 1989.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

TABLE 1B
COMMUNITY BREAKDOWN OF REGISTERED CHIROPRACTORS, ALBERTA, 1988

Community by Population Size	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	95	693,142[3]	1:7,296
Census Metropolitan Area (CMA) of Edmonton	93	785,673[3]	1:8,448
10,000 to 69,999			
Camrose	5	12,968	1:2,594
Fort McMurray	2	34,949	1:17,475
Grande Prairie	6	26,648	1:4,441
Lethbridge	19	60,610	1:3,190
Lloydminster	3	10,201	1:3,400
Medicine Hat	10	42,290	1:4,229
Red Deer	13	54,839	1:4,218
Wetaskiwin	4	10,103	1:2,526
5,000 to 9,999			
Bonnyville	1	5,575	1:5,575
Brooks	5	9,464	1:1,893
Crowsnest Pass	0	6,912	—
Drumheller	2	6,366	1:3,183
Edson	1	7,323	1:7,323
High River	3	5,096	1:1,699
Hinton	3	8,846	1:2,949
Innisfail	3	5,535	1:1,845
Lacombe	3	6,110	1:2,037
Okotoks	2	5,666	1:2,833
Olds	3	5,004	1:1,668
Peace River	3	6,355	1:2,118
Ponoka	2	5,473	1:2,737
Rocky Mountain House	3	5,261	1:1,754
Slave Lake	1	5,611	1:5,611
St. Paul	1	5,128	1:5,128
Stettler	3	5,147	1:1,716
Taber	3	6,382	1:2,127
Vegreville	3	5,276	1:1,759
Whitecourt	2	6,126	1:3,063
Under 5,000	29	540,921	1:18,652
Location Unknown	2	—	—
PROVINCIAL TOTAL	**328**	**2,395,000[4]**	**1:7,302**

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[1] Source: College of Chiropractors of Alberta. Number of chiropractors registered with the CCA and residing in Alberta as of December 31, 1988. Excludes inactive, honorary, and retired members.

[2] Source: "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[4] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

TABLE 2
SELECTED MANPOWER STATISTICS FOR CHIROPRACTORS IN ALBERTA, 1986, 1987, AND 1988

	1986	1987	1988
Number of Registered Personnel[1]	316	312	328
% Change in Number of Registered Personnel	6.4%	-1.3%	5.1%
Population (Alberta)[2]	2,375,100	2,377,700	2,395,000
% Change in Population	1.1%	0.1%	0.7%
Personnel-to-Population Ratios:			
– Alberta	1:7,516	1:7,621	1:7,302

IV. Educational Programs

In Canada, chiropractic training can be obtained at the Canadian Memorial Chiropractic College in Toronto which offers a four-year program. Many of Alberta's chiropractors received their chiropractic training in the United States.

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[1] Source: College of Chiropractors of Alberta. Number of chiropractors registered with the CCA and residing in Alberta as of December 31 of the year indicated. Excludes inactive, honorary, and retired members.

[2] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

Combined Laboratory and X-Ray Technicians

I. Overview

Definition: The combined technician is a hospital worker trained to perform laboratory and x-ray work in smaller hospitals that do not have sufficient volume or range of work to warrant employing both a laboratory technologist and an x-ray technician.

(Source: **Saskatchewan Health Manpower Annual Report 1976**. Regina, Saskatchewan: Saskatchewan Health, 1976)

Since registration with the Alberta Association of Combined Laboratory and X-Ray Technicians is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1988 by the Alberta Health and Social Services Disciplines Committee, was used as an alternative source of manpower information.

There were 306 combined laboratory and x-ray technicians practising in Alberta in 1988. Fifty percent of these individuals were employed in acute care hospitals having less than 300 beds. Another 38 percent were employed in medical laboratories and radiological facilities.[1] Almost forty percent were employed in the Census Metropolitan Areas of Calgary and Edmonton even though in urban centres, medical laboratory and radiation services are usually provided by medical laboratory technologists and medical radiation technologists (see chapters on Medical Laboratory Technologists and Medical Radiation Technologists). The provincial personnel-to-population ratio was 1:7,827 in 1988.

II. Professional Association and Legislation Information

a) Licensing, Registration, or Certification Authority:

Combined Laboratory and X-Ray Technicians Committee
c/o Professions and Occupations Bureau
5th Floor, 10011 – 109 Street
Edmonton, Alberta
T5J 3S8

Chairman: Ms. Audrey Funk

b) Professional Association:

Alberta Association of Combined
Laboratory and X-Ray Technicians
c/o 370 Terrace Plaza
4445 Calgary Trail South
Edmonton, Alberta
T6H 5R7

President: Ms. Audrey Funk

c) Legislation:

The regulations for combined laboratory and x-ray technicians have been passed and will become effective January 1, 1989 under the Health Disciplines Act. These regulations set out the educational and/or employment requirements for registration under the Act. In addition, the types of service and conditions of practice are specified in regulation. The titles "combined laboratory and x-ray technician" and the initials "CLXT" are reserved by regulation for registered members.

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1988," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF PRACTISING COMBINED LABORATORY AND X-RAY TECHNICIANS, ALBERTA, 1988

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	4	57,400	1:14,350
2 (Lethbridge)	11	115,800	1:10,527
3 (Pincher Creek)	6	35,400	1:5,900
4 (Hanna)	7	12,300	1:1,757
5 (Drumheller)	8	38,700	1:4,838
6 (Calgary excluding CMA)	12	38,058	1:3,172
7 (Stettler)	20	40,900	1:2,045
8 (Red Deer)	22	119,200	1:5,418
9 (Rocky Mountain House)	5	16,300	1:3,260
10 (Camrose)	27	79,100	1:2,930
11 (Edmonton excluding CMA)	0	30,227	—
12 (Bonnyville)	13	45,800	1:3,523
13 (Whitecourt)	17	55,300	1:3,253
14 (Hinton)	8	24,800	1:3,100
15 (Banff)	2	22,900	1:11,450
16 (Fort McMurray)	1	48,700	1:48,700
17 (High Level)	15	50,600	1:3,373
18 (Grande Cache)	3	12,500	1:4,167
19 (Grande Prairie)	7	72,100	1:10,300
Census Metropolitan Area (CMA) of Calgary	22	693,142[3]	1:31,506
Census Metropolitan Area (CMA) of Edmonton	96	785,673[3]	1:8,184
PROVINCIAL TOTAL	**306**	**2,395,000**	**1:7,827**

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1988," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "(Preliminary) Population Estimates by Census Division, Alberta, 1988," Alberta Bureau of Statistics, June 1989.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

TABLE 1B
COMMUNITY BREAKDOWN OF PRACTISING COMBINED LABORATORY AND X-RAY TECHNICIANS, ALBERTA, 1988

Community by Population Size	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	22	693,142[3]	1:31,506
Census Metropolitan Area (CMA) of Edmonton	96	785,673[3]	1:8,184
10,000 to 69,999			
Camrose	5	12,968	1:2,594
Fort McMurray	1	34,949	1:34,949
Grande Prairie	0	26,648	—
Lethbridge	1	60,610	1:60,610
Lloydminster	0	10,201	—
Medicine Hat	0	42,290	—
Red Deer	5	54,839	1:10,968
Wetaskiwin	0	10,103	—
5,000 to 9,999			
Bonnyville	4	5,575	1:1,394
Brooks	0	9,464	—
Crowsnest Pass	0	6,912	—
Drumheller	1	6,366	1:6,366
Edson	5	7,323	1:1,465
High River	1	5,096	1:5,096
Hinton	3	8,846	1:2,949
Innisfail	3	5,535	1:1,845
Lacombe	1	6,110	1:6,110
Okotoks	1	5,666	1:5,666
Olds	3	5,004	1:1,668
Peace River	0	6,355	—
Ponoka	4	5,473	1:1,368
Rocky Mountain House	5	5,261	1:1,052
Slave Lake	3	5,611	1:1,870
St. Paul	0	5,128	—
Stettler	3	5,147	1:1,716
Taber	0	6,382	—
Vegreville	0	5,276	—
Whitecourt	2	6,126	1:3,063
Under 5,000	137	540,921	1:3,948
PROVINCIAL TOTAL	**306**	**2,395,000[4]**	**1:7,827**

---

[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1988," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[4] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

TABLE 2
SELECTED MANPOWER STATISTICS FOR
COMBINED LABORATORY AND X-RAY TECHNICIANS
IN ALBERTA, 1986, 1987, AND 1988

	1986	1987	1988
Number of Practising Personnel[1]	296	311	306
% Change in Number of Practising Personnel	-15.2%	5.1%	-1.6%
Population (Alberta)[2]	2,375,100	2,377,700	2,395,000
% Change in Population	1.1%	0.1%	0.7%
Personnel-to-Population Ratios:			
– Alberta	1:8,024	1:7,645	1:7,827

IV. Educational Programs

The Northern Alberta Institute of Technology offers a one-year combined laboratory and x-ray technology certificate program. The program produced 12 graduates in 1987-88.

TABLE 3
EDUCATIONAL PROGRAM FOR
COMBINED LABORATORY AND X-RAY TECHNICIANS
IN ALBERTA[3]

	1985-86	1986-87	1987-88
CERTIFICATE IN COMBINED LABORATORY AND X-RAY TECHNOLOGY			
Northern Alberta Institute of Technology (Program Length: 1 year)			
Enrolments:	20	23	21
Graduates:	18	15	12

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[1] Sources: "Health and Social Service Personnel Working in Alberta, March 31," 1986, 1987 and 1988 editions, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

[3] Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1988.

Community Health Representatives

I. Overview

Definition: Provide health education and advice primarily to native communities.

(Source: Employer Survey Questionnaire: Alberta Health and Social Services Disciplines Committee, 1988).

Although registration with the Community Health Representative Association of Alberta is not mandatory, this organization had the most comprehensive information available on community health representatives in Alberta for 1988.

There were 97 community health representatives who registered with their Association and resided in Alberta in 1988.[1] Community health representatives in the Census Metropolitan Areas of Calgary and Edmonton accounted for only 3 percent of the total. The provincial personnel-to-population ratio was 1:24,691 in 1988.

II. Professional Association and Legislation Information

a) Licensing, Registration, or Certification Authority:

None.

b) Professional Association:

Community Health Representative Association
c/o Alberta Indian Health Care Commission
1390 First Edmonton Place
10665 Jasper Avenue
Edmonton, Alberta
T5J 3S9

President: Ms. Betty Smith

c) Legislation:

None.

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[1] Source: Community Health Representative Association of Alberta. Number of community health representatives registered with the Association and residing in Alberta as of December 31, 1988.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF REGISTERED COMMUNITY HEALTH REPRESENTATIVES, ALBERTA, 1988

Census Division (Major Urban Centre)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	0	57,400	—
2 (Lethbridge)	0	115,800	—
3 (Pincher Creek)	5	35,400	1:7,080
4 (Hanna)	3	12,300	1:4,100
5 (Drumheller)	2	38,700	1:19,350
6 (Calgary excluding CMA)	1	38,058	1:38,058
7 (Stettler)	0	40,900	—
8 (Red Deer)	5	119,200	1:23,840
9 (Rocky Mountain House)	2	16,300	1:8,150
10 (Camrose)	5	79,100	1:15,820
11 (Edmonton excluding CMA)	2	30,227	1:15,114
12 (Bonnyville)	8	45,800	1:5,725
13 (Whitecourt)	2	55,300	1:27,650
14 (Hinton)	0	24,800	—
15 (Banff)	0	22,900	—
16 (Fort McMurray)	19	48,700	1:2,563
17 (High Level)	32	50,600	1:1,581
18 (Grande Cache)	2	12,500	1:6,250
19 (Grande Prairie)	1	72,100	1:72,100
Census Metropolitan Area (CMA) of Calgary	1	693,142[3]	1:693,142
Census Metropolitan Area (CMA) of Edmonton	2	785,673[3]	1:392,837
Location Unknown	5	—	—
PROVINCIAL TOTAL	**97**	**2,395,000**	**1:24,691**

---

[1] Source: Community Health Representative Association of Alberta. Number of community health representatives registered with the Association and residing in Alberta as of December 31, 1988.

[2] Source: "(Preliminary) Population Estimates by Census Division, Alberta, 1988," Alberta Bureau of Statistics, June 1989.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

TABLE 1B
COMMUNITY BREAKDOWN OF REGISTERED COMMUNITY HEALTH REPRESENTATIVES, ALBERTA, 1988

Community by Population Size	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	1	693,142[3]	1:693,142
Census Metropolitan Area (CMA) of Edmonton	2	785,673[3]	1:392,837
10,000 to 69,999			
Camrose	0	12,968	—
Fort McMurray	2	34,949	1:17,475
Grande Prairie	0	26,648	—
Lethbridge	0	60,610	—
Lloydminster	0	10,201	—
Medicine Hat	0	42,290	—
Red Deer	0	54,839	—
Wetaskiwin	0	10,103	—
5,000 to 9,999			
Bonnyville	1	5,575	1:5,575
Brooks	0	9,464	—
Crowsnest Pass	0	6,912	—
Drumheller	0	6,366	—
Edson	0	7,323	—
High River	0	5,096	—
Hinton	0	8,846	—
Innisfail	0	5,535	—
Lacombe	0	6,110	—
Okotoks	0	5,666	—
Olds	0	5,004	—
Peace River	0	6,355	—
Ponoka	0	5,473	—
Rocky Mountain House	2	5,261	1:2,631
Slave Lake	0	5,611	—
St. Paul	1	5,128	1:5,128
Stettler	0	5,147	—
Taber	0	6,382	—
Vegreville	0	5,276	—
Whitecourt	0	6,126	—
Under 5,000	83	540,921	1:6,517
Location Unknown	5	—	—
PROVINCIAL TOTAL	**97**	**2,395,000[4]**	**1:24,691**

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[1] Source: Community Health Representative Association of Alberta. Number of community health representatives registered with the Association and residing in Alberta as of December 31, 1988.

[2] Source: "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[4] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

TABLE 2
SELECTED MANPOWER STATISTICS FOR COMMUNITY HEALTH REPRESENTATIVES IN ALBERTA, 1986, 1987, AND 1988

	1986	1987	1988
Number of Practising or Registered Personnel	73[1]	40[1]	97[2]
% Change in Number of Practising or Registered Personnel	-21.5%	-45.2%	N/A
Population (Alberta)[3]	2,375,100	2,377,700	2,395,000
% Change in Population	1.1%	0.1%	0.7%
Personnel-to-Population Ratios:			
– Alberta	1:32,536	1:59,443	1:24,691

IV. Educational Programs

The Alberta Vocational Centre in Lac La Biche offers a nine-month certificate program in community health work. The program produced 15 graduates in 1987-88.

TABLE 3
EDUCATIONAL PROGRAM FOR COMMUNITY HEALTH REPRESENTATIVES IN ALBERTA[4]

	1985-86	1986-87	1987-88
COMMUNITY HEALTH WORKER CERTIFICATE			
Alberta Vocational Centre — Lac La Biche			
(Program Length: 9 months)			
Enrolments:	21	25	24
Graduates:	14	15	15

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31," 1986 and 1987 editions, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: Community Health Representative Association of Alberta. Number of community health representatives registered with the Association and residing in Alberta as of December 31, 1988.

[3] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

[4] Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1988.

Dental Assistants

I. Overview

Definition: Assist dentists in care and treatment of patients. Seat and prepare patient for dental treatment. Arrange instruments, materials and medications and hand them to the dentist. Keep oral operating area clear during dental procedure by using suction devices, water sprays, cotton rolls and holders, and by retraction of cheek and tongue. Prepare filling materials, using mechanical amalgamator and instruments and supply them to dentist as required. Comfort patient through reassuring conversation and actions. Give emergency treatment, as directed by dentist, for local and systemic distress. Advise patients on post-operative care, oral hygiene, and importance of diet and preventive dentistry. Sterilize instruments using ovens, autoclaves and aseptic solutions. Pour, trim and mount plaster models from impressions taken by dentist and perform other dental laboratory procedures. Perform routine maintenance duties such as lubricating equipment, sharpening dental instruments, replacing expendable parts and cleaning equipment and treatment area. Expose, process and mount X-ray films. Polish teeth, apply fluoride to teeth and perform other intra-oral procedures, as permitted by training and by provincial legislation. Act as receptionist, if required.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

As of August 31, 1988 there were 2,005 certified and non-certified members of the Alberta Dental Assistants Association. Of these, 1,767 were certified and resided in Alberta.[1] Since registration is voluntary, the survey of health and social service personnel working in Alberta, conducted on March 31, 1988 by the Alberta Health and Social Services Disciplines Committee, was used as the source of manpower information.

According to the survey, 2,090 dental assistants were practising in the province in 1988.[2] Ninety-three percent of these individuals were employed in dentists' offices.[3] Dental assistants employed in the Census Metropolitan Areas of Calgary and Edmonton accounted for 70 percent of the total. The provincial dental assistant-to-population ratio was 1:1,146 in 1988.

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[1] Source: Alberta Dental Assistants Association. Number of dental assistants registered with the Association as of August 31, 1988.

[2] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1988," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[3] Ibid.

II. Professional Association and Legislation Information

a) Professional Association/Certification Body:

Alberta Dental Assistants Association
42 Beacon Crescent
St. Albert, Alberta
T8N 0A3

Executive Director/Registrar: Ms. Melanie Bachand

President: Ms. Dorothy McNish

President Elect: Ms. Moira Cookshaw

b) Legislation:

The Dental Profession Act established the Dental Occupations Council consisting of two dentists, two dental hygienists, and two dental assistants. The representatives are appointed by their respective professional associations. This group recommends regulations to the Board of the Alberta Dental Association regarding the duties, conditions of practice, and standards of conduct and competency for dental assistants.

Currently, routine dental assisting does not require certification. Intra-oral functions, however, may only be provided by those dental assistants who have been certified by the Alberta Dental Assistants Association.

Regulations giving the Alberta Dental Assistants Association the authority to register and discipline dental assistants are being considered under the Dental Profession Act.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF PRACTISING DENTAL ASSISTANTS, ALBERTA, 1988

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	49	57,400	1:1,171
2 (Lethbridge)	99	115,800	1:1,170
3 (Pincher Creek)	21	35,400	1:1,686
4 (Hanna)	4	12,300	1:3,075
5 (Drumheller)	21	38,700	1:1,843
6 (Calgary excluding CMA)	30	38,058	1:1,269
7 (Stettler)	19	40,900	1:2,153
8 (Red Deer)	95	119,200	1:1,255
9 (Rocky Mountain House)	5	16,300	1:3,260
10 (Camrose)	54	79,100	1:1,465
11 (Edmonton excluding CMA)	12	30,227	1:2,519
12 (Bonnyville)	45	45,800	1:1,01
13 (Whitecourt)	35	55,300	1:1,580
14 (Hinton)	12	24,800	1:2,067
15 (Banff)	22	22,900	1:1,041
16 (Fort McMurray)	41	48,700	1:1,188
17 (High Level)	19	50,600	1:2,663
18 (Grande Cache)	4	12,500	1:3,125
19 (Grande Prairie)	49	72,100	1:1,471
Census Metropolitan Area (CMA) of Calgary	615	693,142[3]	1:1,127
Census Metropolitan Area (CMA) of Edmonton	839	785,673[3]	1:936
PROVINCIAL TOTAL	**2,090**	**2,395,000**	**1:1,146**

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1988," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "(Preliminary) Population Estimates by Census Division, Alberta, 1988," Alberta Bureau of Statistics, June 1989.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

TABLE 1B
COMMUNITY BREAKDOWN OF PRACTISING DENTAL ASSISTANTS, ALBERTA, 1988

Community by Population Size	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	615	693,142[3]	1:1,127
Census Metropolitan Area (CMA) of Edmonton	839	785,673[3]	1:936
10,000 to 69,999			
Camrose	19	12,968	1:683
Fort McMurray	37	34,949	1:945
Grande Prairie	27	26,648	1:987
Lethbridge	73	60,610	1:830
Lloydminster	9	10,201	1:1,133
Medicine Hat	48	42,290	1:881
Red Deer	71	54,839	1:772
Wetaskiwin	12	10,103	1:842
5,000 to 9,999			
Bonnyville	13	5,575	1:429
Brooks	8	9,464	1:1,183
Crowsnest Pass	9	6,912	1:768
Drumheller	6	6,366	1:1,061
Edson	6	7,323	1:1,221
High River	11	5,096	1:463
Hinton	6	8,846	1:1,474
Innisfail	7	5,535	1:791
Lacombe	5	6,110	1:1,222
Okotoks	5	5,666	1:1,133
Olds	7	5,004	1:715
Peace River	15	6,355	1:424
Ponoka	8	5,473	1:684
Rocky Mountain House	5	5,261	1:1,052
Slave Lake	7	5,611	1:802
St. Paul	9	5,128	1:570
Stettler	8	5,147	1:643
Taber	4	6,382	1:1,596
Vegreville	6	5,276	1:879
Whitecourt	15	6,126	1:408
Under 5,000	180	540,921	1:3,005
PROVINCIAL TOTAL	**2,090**	**2,395,000[4]**	**1:1,146**

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1988," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[4] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

TABLE 2
SELECTED MANPOWER STATISTICS FOR DENTAL ASSISTANTS IN ALBERTA, 1986, 1987, AND 1988

	1986	1987	1988
Number of Practising Personnel[1]	1,983	2,032	2,090
% Change in Number of Practising Personnel	7.9%	2.5%	2.9%
Population (Alberta)[2]	2,375,100	2,377,700	2,395,000
% Change in Population	1.1%	0.1%	0.7%
Personnel-to-Population Ratios:			
– Alberta	1:1,198	1:1,170	1:1,146

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[1] Sources: "Health and Social Service Personnel Working in Alberta, March 31," 1986, 1987 and 1988 editions, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

IV. Educational Programs

Both the Southern Alberta Institute of Technology and the Northern Alberta Institute of Technology offer dental assisting certificate programs. The two programs produced 112 graduates in 1987-88. In addition, the Northern Alberta Institute of Technology offers a correspondence training program. This program, which is 24 months in length and is designed for dental assistants presently employed, had 130 students and 59 graduates in 1987-88.

TABLE 3
EDUCATIONAL PROGRAMS FOR DENTAL ASSISTANTS IN ALBERTA[1]

	1985-86	1986-87	1987-88
DENTAL ASSISTING CERTIFICATE			
Northern Alberta Institute of Technology (Program Length: 9 months)			
Enrolments:	76	74	72
Graduates:	74	69	70
Correspondence Program (Program Length: 24 months)			
Enrolments:	196	280	130
Graduates:	21	42	59
Southern Alberta Institute of Technology (Program Length: 39 weeks)			
Enrolments:	40	48	48
Graduates:	39	44	42
PROVINCIAL TOTAL			
Number of Training Programs: 3			
Graduates:	134	153	171

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[1] Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1988.

Dental Hygienists

I. Overview

Definition: Provide preventive dental services and instruct patients in care of teeth and mouth. Scale and polish teeth to remove hard and soft deposits, using dental instruments and equipment. Polish fillings to remove tarnish and corrosion, using motorized apparatus. Apply topical agents and sealants to teeth to reduce decay. Conduct preliminary dental examination and record case history of patient. Record observed conditions and information for diagnosis and treatment planning by dentist. Instruct individuals and groups in home dental care and provide dietary counselling related to dental health. Expose, process and mount dental x-ray films. Take impressions of teeth for study models. Administer local anaesthetics, place, finish and polish fillings, and remove sutures as permitted by training and by provincial legislation.[1]

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980).

As of October 31, 1988 there were 403 dental hygienists registered with the Alberta Dental Hygienists' Association. Since registration is voluntary, the survey of health and social service personnel working in Alberta, conducted on March 31, 1988 by the Alberta Health and Social Services Disciplines Committee, was used as an alternative source of manpower information.

According to the survey, 709 dental hygienists were practising in the province in 1988.[2] Eighty-seven percent of these individuals were employed in dentists' offices and 9 percent were employed in health units.[3] Dental hygienists employed in the Census Metropolitan Areas of Calgary and Edmonton accounted for 75 percent of the total. The provincial dental hygienist-to-population ratio was 1:3,378 in 1988.

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[1] Alberta legislation does not permit dental hygienists to engage in activities described in the last sentence.

[2] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1988," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[3] Ibid.

II. Professional Association and Legislation Information

a) Licensing, Registration, or Certification Authority:

None.

b) Professional Association:

Alberta Dental Hygienists' Association
9602 – 86 Street
Edmonton, Alberta
T6C 3E9

President: Josephine Juchli

c) Legislation:

The Dental Profession Act established the Dental Occupations Council consisting of two dentists, two dental hygienists, and two dental assistants. The representatives are appointed by their respective professional associations. This group recommends regulations to the Board of the Alberta Dental Association regarding the duties, conditions of practice, and standards of conduct and competency for dental hygienists.

In order to practise in the province, dental hygienists must be graduates of the Dental Hygiene program at the University of Alberta. If they are graduates from other training programs, they must be certified by the Universities Coordinating Council.

Although registration and licensure are not mandatory at present, regulations giving the Alberta Dental Hygienists' Association the authority to register and discipline dental hygienists are being considered under the Dental Profession Act.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF PRACTISING DENTAL HYGIENISTS, ALBERTA, 1988

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	13	57,400	1:4,415
2 (Lethbridge)	19	115,800	1:6,095
3 (Pincher Creek)	3	35,400	1:11,800
4 (Hanna)	3	12,300	1:4,100
5 (Drumheller)	4	38,700	1:9,675
6 (Calgary excluding CMA)	8	38,058	1:4,757
7 (Stettler)	4	40,900	1:10,225
8 (Red Deer)	41	119,200	1:2,907
9 (Rocky Mountain House)	2	16,300	1:8,150
10 (Camrose)	21	79,100	1:3,767
11 (Edmonton excluding CMA)	4	30,227	1:7,557
12 (Bonnyville)	8	45,800	1:5,725
13 (Whitecourt)	6	55,300	1:9,217
14 (Hinton)	4	24,800	1:6,200
15 (Banff)	5	22,900	1:4,580
16 (Fort McMurray)	20	48,700	1:2,435
17 (High Level)	1	50,600	1:50,600
18 (Grande Cache)	0	12,500	—
19 (Grande Prairie)	12	72,100	1:6,008
Census Metropolitan Area (CMA) of Calgary	263	693,142[3]	1:2,636
Census Metropolitan Area (CMA) of Edmonton	268	785,673[3]	1:2,932
PROVINCIAL TOTAL	**709**	**2,395,000**	**1:3,378**

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1988," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "(Preliminary) Population Estimates by Census Division, Alberta, 1988," Alberta Bureau of Statistics, June 1989.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

TABLE 1B
COMMUNITY BREAKDOWN OF PRACTISING DENTAL HYGIENISTS, ALBERTA, 1988

Community by Population Size	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	263	693,142[3]	1:2,636
Census Metropolitan Area (CMA) of Edmonton	268	785,673[3]	1:2,932
10,000 to 69,999			
Camrose	8	12,968	1:1,621
Fort McMurray	19	34,949	1:1,839
Grande Prairie	10	26,648	1:2,665
Lethbridge	10	60,610	1:6,061
Lloydminster	5	10,201	1:2,040
Medicine Hat	13	42,290	1:3,253
Red Deer	31	54,839	1:1,769
Wetaskiwin	4	10,103	1:2,526
5,000 to 9,999			
Bonnyville	4	5,575	1:1,394
Brooks	4	9,464	1:2,366
Crowsnest Pass	0	6,912	—
Drumheller	2	6,366	1:3,183
Edson	0	7,323	—
High River	3	5,096	1:1,699
Hinton	4	8,846	1:2,212
Innisfail	2	5,535	1:2,768
Lacombe	4	6,110	1:1,528
Okotoks	1	5,666	1:5,666
Olds	2	5,004	1:2,502
Peace River	1	6,355	1:6,355
Ponoka	3	5,473	1:1,824
Rocky Mountain House	2	5,261	1:2,631
Slave Lake	0	5,611	—
St. Paul	1	5,128	1:5,128
Stettler	3	5,147	1:1,716
Taber	2	6,382	1:3,191
Vegreville	2	5,276	1:2,638
Whitecourt	2	6,126	1:3,063
Under 5,000	36	540,921	1:15,026
PROVINCIAL TOTAL	**709**	**2,395,000[4]**	**1:3,378**

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1988," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[4] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

TABLE 2
SELECTED MANPOWER STATISTICS FOR DENTAL HYGIENISTS IN ALBERTA, 1986, 1987, AND 1988

	1986	1987	1988
Number of Practising Personnel[1]	601	645	709
% Change in Number of Practising Personnel	0.5%	7.3%	9.9%
Population (Alberta)[2]	2,375,100	2,377,700	2,395,000
% Change in Population	1.1%	0.1%	0.7%
Personnel-to-Population Ratios:			
– Alberta	1:3,952	1:3,686	1:3,378

IV. Educational Programs

The University of Alberta offers a two-year dental hygiene diploma program. The program produced 37 graduates in 1987-88.

TABLE 3
EDUCATIONAL PROGRAM FOR DENTAL HYGIENISTS IN ALBERTA[3]

	1985-86	1986-87	1987-88
DENTAL HYGIENE DIPLOMA			
University of Alberta			
(Program Length: 2 years)			
Enrolments:			
1st Year	43	43	43
2nd Year	40	39	37
Graduates:	40	39	37

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[1] Sources: "Health and Social Service Personnel Working in Alberta, March 31," 1986, 1987 and 1988 editions, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

[3] Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1988.

Dental Technicians

I. Overview

Definition: Make and repair dentures and other dental devices. Fabricate full and partial dentures, using wax and plaster models, dental surveyors, articulators (fitting devices) and electric grinders and polishers. Shape metal, vulcanite or plastic plates for dentures. Mount porcelain or plastic teeth in plates using knowledge of size, shape, shade and colour. Finish dentures on grinding and buffing wheels. Construct metal clasps, inlays, bridgework and other aides according to specifications. Join breaks, make additions or reline denture bases to repair dentures.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980).

There were 186 dental technicians who resided in Alberta and registered with the Dental Technicians Board in 1988.[1] Dental technicians located in the Census Metropolitan Areas of Calgary and Edmonton accounted for 85 percent of the total. Dentists in rural areas of the province contract some of their dental laboratory work to dental technicians in the major cities.

The provincial dental technician-to-population ratio was 1:12,876 in 1988. Some of the services performed by dental technicians, such as the making of complete dentures, can also be provided by denturists (see chapter on Denturists).

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[1] Source: Dental Technicians Board, Alberta Professions and Occupations Bureau. Number of dental technicians registered with the Dental Technicians Board and residing in Alberta as of December 31, 1988. Number includes dental technicians who were also denturists.

II. Professional Association and Legislation Information

a) Licensing, Registration or Certification Authority:

Dental Technicians Board
c/o Professions and Occupations Bureau
5th Floor, Kensington Place
10011 – 109 Street
Edmonton, Alberta
T5J 3S8

Chairman: Mr. Brian Babey

b) Professional Association:

Alberta Society of Registered Dental Technicians
211, 11523 – 100 Avenue
Edmonton, Alberta
T5K 0S8

President: Mr. Gary Fedoretz

c) Legislation:

Under the authority of the Dental Technicians Act, any individual who carries on a business as a dental technician must register with the Dental Technicians Board, a provincial government licensing body. The Dental Technicians Board is responsible for maintaining professional discipline and setting the educational qualifications required for registration. The titles "dental technician" and "registered dental technician" are reserved under the Act for registered members.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF REGISTERED DENTAL TECHNICIANS, ALBERTA, 1988

Census Division (Major Urban Centre)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	3	57,400	1:19,133
2 (Lethbridge)	9	115,800	1:12,867
3 (Pincher Creek)	0	35,400	—
4 (Hanna)	0	12,300	—
5 (Drumheller)	0	38,700	—
6 (Calgary excluding CMA)	2	38,058	1:19,029
7 (Stettler)	0	40,900	—
8 (Red Deer)	3	119,200	1:39,733
9 (Rocky Mountain House)	0	16,300	—
10 (Camrose)	2	79,100	1:39,550
11 (Edmonton excluding CMA)	0	30,227	—
12 (Bonnyville)	1	45,800	1:45,800
13 (Whitecourt)	1	55,300	1:55,300
14 (Hinton)	0	24,800	—
15 (Banff)	0	22,900	—
16 (Fort McMurray)	0	48,700	—
17 (High Level)	0	50,600	—
18 (Grande Cache)	0	12,500	—
19 (Grande Prairie)	3	72,100	1:24,033
Census Metropolitan Area (CMA) of Calgary	63	693,142[3]	1:11,002
Census Metropolitan Area (CMA) of Edmonton	96	785,673[3]	1:8,184
Location Unknown	3	—	—
PROVINCIAL TOTAL	**186**	**2,395,000**	**1:12,876**

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[1] Source: Dental Technicians Board, Alberta Professions and Occupations Bureau. Number of dental technicians registered with the Dental Technicians Board and residing in Alberta as of December 31, 1988. Number includes dental technicians who were also denturists.

[2] Source: "(Preliminary) Population Estimates by Census Division, Alberta, 1988," Alberta Bureau of Statistics, June 1989.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

TABLE 1B
COMMUNITY BREAKDOWN OF REGISTERED DENTAL TECHNICIANS, ALBERTA, 1988

Community by Population Size	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	63	693,142[3]	1:11,002
Census Metropolitan Area (CMA) of Edmonton	96	785,673[3]	1:8,184
10,000 to 69,999			
Camrose	2	12,968	1:6,484
Fort McMurray	0	34,949	—
Grande Prairie	3	26,648	1:8,883
Lethbridge	9	60,610	1:6,734
Lloydminster	0	10,201	—
Medicine Hat	3	42,290	1:14,097
Red Deer	2	54,839	1:27,420
Wetaskiwin	0	10,103	—
5,000 to 9,999			
Bonnyville	1	5,575	1:5,575
Brooks	0	9,464	—
Crowsnest Pass	0	6,912	—
Drumheller	0	6,366	—
Edson	0	7,323	—
High River	0	5,096	—
Hinton	0	8,846	—
Innisfail	0	5,535	—
Lacombe	0	6,110	—
Okotoks	1	5,666	1:5,666
Olds	0	5,004	—
Peace River	0	6,355	—
Ponoka	0	5,473	—
Rocky Mountain House	0	5,261	—
Slave Lake	0	5,611	—
St. Paul	0	5,128	—
Stettler	0	5,147	—
Taber	0	6,382	—
Vegreville	0	5,276	—
Whitecourt	0	6,126	—
Under 5,000	3	540,921	1:180,307
Location Unknown	3	—	—
PROVINCIAL TOTAL	**186**	**2,395,000[4]**	**1:12,876**

---

[1] Source: Dental Technicians Board, Alberta Professions and Occupations Bureau. Number of dental technicians registered with the Dental Technicians Board and residing in Alberta as of December 31, 1988. Number includes dental technicians who were also denturists.

[2] Source: "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[4] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

TABLE 2
SELECTED MANPOWER STATISTICS FOR DENTAL TECHNICIANS IN ALBERTA, 1986, 1987, AND 1988

	1986	1987	1988
Number of Registered Personnel[1]	168	177	186
% Change in Number of Registered Personnel	15.9%	5.4%	5.1%
Population (Alberta)[2]	2,375,100	2,377,700	2,395,000
% Change in Population	1.1%	0.1%	0.7%
Personnel-to-Population Ratios:			
– Alberta	1:14,138	1:13,433	1:12,876

IV. Educational Programs

In order to become a dental technician, an individual must pass the examination set by the Dental Technicians Board and must have either five years of practical experience, one of which is in Alberta, or a two-year dental laboratory technology diploma plus three years of practical experience.

A two-year dental laboratory technology diploma program is offered at the Northern Alberta Institute of Technology (NAIT). The program produced 18 graduates in 1987-88. In 1988, five additional dental technicians met the certification requirements of the Board.

TABLE 3
EDUCATIONAL PROGRAM FOR DENTAL TECHNICIANS IN ALBERTA[3]

	1985-86	1986-87	1987-88
DENTAL LABORATORY TECHNOLOGY DIPLOMA			
Northern Alberta Institute of Technology (Program Length: 2 years)			
Enrolments:			
1st Year	18	18	18
2nd Year	15	15	17
Graduates:	11	15	18

---

[1] Source: Dental Technicians Board, Alberta Professions and Occupations Bureau. Number of dental technicians registered with the Dental Technicians Board and residing in Alberta as of December 31 of the indicated year. Number includes dental technicians who were also denturists.

[2] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

[3] Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1988.

Dentists

I. Overview

Definition: The work of dentists is concerned with examining, diagnosing, preventing and treating ailments or abnormalities of gums and teeth, and includes oral surgery.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

There were 1,258 dentists who resided in Alberta and registered with the Alberta Dental Association (ADA) in 1988. Of these dentists, 89 percent were general practitioners and 11 percent were specialists.[1] The number of dentists by specialty is shown in Table 4 of this chapter. Approximately 72 percent of the dentists were graduates of the University of Alberta Faculty of Dentistry, 21 percent were graduates of dental training programs in other Canadian provinces, and 7 percent were graduates of schools of dentistry in other countries.[2]

Dentists located in the Census Metropolitan Areas of Calgary and Edmonton accounted for 76 percent of the total. The provincial dentist-to- population ratio was 1:1,904 in 1988.

II. Professional Association and Legislation Information

a) Professional Association/Registration Board:

Alberta Dental Association
101, 8230 – 105 Street
Edmonton, Alberta
T6E 5H9

Executive Director/Registrar: Dr. B. P. Martinello

President: Dr. R. D. Sandilands

President Elect: Dr. W. G. Mabey

b) Legislation:

Under the authority of the Dental Profession Act, all individuals who wish to practise as dentists must register with the Alberta Dental Association.

Besides registration functions, the ADA is responsible for regulating the conduct of its members and for practice review. The Dental Profession Act sets the educational qualifications required for registration with the ADA. Post-basic educational qualifications required for registration as a dental specialist are also set in regulation. The Universities Coordinating Council is responsible for the certification of specialists. The professional association also has the authority to prescribe continuing education programs which must be completed by members in order to qualify for re-registration.

---

[1] Source: Alberta Dental Association. Number of dentists registered with the ADA and residing in Alberta as of December 31, 1988. Excludes inactive and retired members and some dentists who worked for the Federal Government but were not registered with the ADA.

[2] Ibid.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF REGISTERED DENTISTS, ALBERTA, 1988

Census Division (Major Urban Centre)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	20	57,400	1:2,870
2 (Lethbridge)	47	115,800	1:2,464
3 (Pincher Creek)	12	35,400	1:2,950
4 (Hanna)	2	12,300	1:6,150
5 (Drumheller)	14	38,700	1:2,764
6 (Calgary excluding CMA)	13	38,058	1:2,928
7 (Stettler)	11	40,900	1:3,718
8 (Red Deer)	58	119,200	1:2,055
9 (Rocky Mountain House)	4	16,300	1:4,075
10 (Camrose)	23	79,100	1:3,439
11 (Edmonton excluding CMA)	4	30,227	1:7,557
12 (Bonnyville)	17	45,800	1:2,694
13 (Whitecourt)	15	55,300	1:3,687
14 (Hinton)	7	24,800	1:3,543
15 (Banff)	11	22,900	1:2,082
16 (Fort McMurray)	14	48,700	1:3,479
17 (High Level)	5	50,600	1:10,120
18 (Grande Cache)	3	12,500	1:4,167
19 (Grande Prairie)	22	72,100	1:3,277
Census Metropolitan Area (CMA) of Calgary	441	693,142[3]	1:1,572
Census Metropolitan Area (CMA) of Edmonton	515	785,673[3]	1:1,526
PROVINCIAL TOTAL	**1,258**	**2,395,000**	**1:1,904**

---

[1] Source: Alberta Dental Association. Number of dentists registered with the ADA and residing in Alberta as of December 31, 1988. Excludes inactive and retired members and some dentists who worked for the Federal Government but were not registered with the ADA.

[2] Source: "(Preliminary) Population Estimates by Census Division, Alberta, 1988," Alberta Bureau of Statistics, June 1989.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

TABLE 1B
COMMUNITY BREAKDOWN OF REGISTERED DENTISTS, ALBERTA, 1988

Community by Population Size	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	441	693,142[3]	1:1,572
Census Metropolitan Area (CMA) of Edmonton	515	785,673[3]	1:1,526
10,000 to 69,999			
Camrose	7	12,968	1:1,853
Fort McMurray	12	34,949	1:2,912
Grande Prairie	14	26,648	1:1,903
Lethbridge	35	60,610	1:1,732
Lloydminster	6	10,201	1:1,700
Medicine Hat	19	42,290	1:2,226
Red Deer	45	54,839	1:1,219
Wetaskiwin	4	10,103	1:2,526
5,000 to 9,999			
Bonnyville	3	5,575	1:1,858
Brooks	2	9,464	1:4,732
Crowsnest Pass	2	6,912	1:3,456
Drumheller	3	6,366	1:2,122
Edson	3	7,323	1:2,441
High River	3	5,096	1:1,699
Hinton	4	8,846	1:2,212
Innisfail	5	5,535	1:1,107
Lacombe	5	6,110	1:1,222
Okotoks	4	5,666	1:1,417
Olds	2	5,004	1:2,502
Peace River	4	6,355	1:1,589
Ponoka	3	5,473	1:1,824
Rocky Mountain House	4	5,261	1:1,315
Slave Lake	2	5,611	1:2,806
St. Paul	5	5,128	1:1,026
Stettler	3	5,147	1:1,716
Taber	3	6,382	1:2,127
Vegreville	4	5,276	1:1,319
Whitecourt	3	6,126	1:2,042
Under 5,000	93	540,921	1:5,816
PROVINCIAL TOTAL	**1,258**	**2,395,000[4]**	**1:1,904**

---

[1] Source: Alberta Dental Association. Number of dentists registered with the ADA and residing in Alberta as of December 31, 1988. Excludes inactive and retired members and some dentists who worked for the Federal Government but were not registered with the ADA.

[2] Source: "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[4] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

TABLE 2
SELECTED MANPOWER STATISTICS FOR DENTISTS IN ALBERTA, 1986, 1987, AND 1988

	1986	1987	1988
Number of Registered Personnel[1]	1,224	1,276	1,258
% Change in Number of Registered Personnel	3.2%	4.2%	-1.4%
Population (Alberta)[2]	2,375,100	2,377,700	2,395,000
% Change in Population	1.1%	0.1%	0.7%
Personnel-to-Population Ratios:			
– Alberta	1:1,940	1:1,863	1:1,904

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[1] Source: Alberta Dental Association. Number of dentists registered with the ADA and residing in Alberta as of December 31 of the indicated year. Excludes inactive and retired members and some dentists who worked for the Federal Government but were not registered with the ADA.

[2] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

IV. Educational Programs

The University of Alberta offers a four-year Doctor of Dental Surgery (DDS) degree program. A minimum of two years of university preparation is a pre-requisite for acceptance into the program. The program produced 44 graduates in 1987-88.

TABLE 3
EDUCATIONAL PROGRAM FOR DENTISTS IN ALBERTA[1]

	1985-86	1986-87	1987-88
DOCTOR OF DENTAL SURGERY University of Alberta (Program Length: 4 years)			
Enrolments:			
1st Year	50	50	50
2nd Year	49	46	49
3rd Year	44	46	51
4th Year	47	44	45
Graduates:	44	42	44

TABLE 4
DENTISTS BY SPECIALTY AND PERSONNEL-TO-POPULATION RATIOS BY SPECIALTY, ALBERTA, 1988

Specialty	Number of Dentists[2]	Personnel-to-Population Ratio[3]
Dental Public Health	3	1:798,333
Endodontics	13	1:184,231
Oral Pathology	3	1:798,333
Oral Radiology	2	1:1,197,500
Oral and Maxillofacial Surgery	19	1:126,053
Orthodontics	51	1:46,961
Paedodontics	16	1:149,688
Periodontics	18	1:133,056
Prosthodontics	19	1:126,053
Specialty Total	144	1:16,632
General Practice Total	1,114	1:2,150
GRAND TOTAL	**1,258**	**1:1,904**

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[1] Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1988.

[2] Source: Alberta Dental Association. Number of dentists registered with the ADA and residing in Alberta as of December 31, 1988. Excludes inactive and retired members and some dentists who worked for the Federal Government but were not registered with the ADA.

[3] Source: Ratios calculated using a provincial population of 2,395,000 as taken from "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

Denturists

I. Overview

Definition: Design, construct, fit and repair dentures. Measure patient's jaws to determine size and shape of dentures using face bows, dental articulators and other devices. Make impressions and moulds of teeth, gums and jaws and design dentures. Direct other workers to construct dentures.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

There were 202 certified denturists (formerly known as certified dental mechanics) who resided in Alberta and registered with the Board of Examiners for Certified Dental Mechanics in 1988.[1] Denturists located in the Census Metropolitan Areas of Calgary and Edmonton accounted for 67 percent of the total. The number of certified denturists in Alberta increased by 7.4 percent between 1986 and 1988 while the provincial population grew by 0.8 percent during the same period. The provincial denturist-to-population ratio was 1:11,856 in 1988.

Denturists usually offer their services from denture clinics independent of a dentist. In Alberta, denturists are permitted to furnish complete dentures only, that is, appliances for individuals with no natural upper or lower teeth. Some of the services performed by denturists, such as the manufacture of complete dentures, are also provided by dental technicians. However, dental technicians are not permitted to fit appliances. Other functions of denturists, such as taking impressions for complete dentures, are also carried out by dentists (see chapters on Dental Technicians and Dentists).

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[1] Source: The Board of Examiners for Certified Dental Mechanics, Alberta Professions and Occupations Bureau. Number of denturists registered with the Board and residing in Alberta as of December 31, 1988. Number includes denturists who were also dental technicians.

II. Professional Association and Legislation Information

a) Licensing, Registration or Certification Authority:

Board of Examiners for Certified
Dental Mechanics
c/o Professions and Occupations Bureau
5th Floor, Kensington Place
10011 – 109 Street
Edmonton, Alberta
T5J 3S8

Chairman: Mr. Elmar Abele

b) Professional Association:

Denturist Society of Alberta
201, 2 Athabascan Avenue
Sherwood Park, Alberta
T8A 4E3

President: Mr. Robert Richardson

c) Legislation:

Under the authority of the Dental Mechanics Act, individuals who wish to practise as denturists in the province must be certified by and registered with the Board of Examiners for Certified Dental Mechanics, a provincial government licensing body. Registration with the Denturist Society of Alberta is voluntary.

The Board is responsible for regulating the conduct of denturists and for maintaining professional discipline. It is empowered to re-examine any denturist at any time and to suspend or cancel his/her certification if warranted. The Board also sets the educational qualifications required for certification as a denturist in Alberta.

In 1981, the Dental Mechanics Act was amended to permit dental mechanics to identify themselves as "denturists." The titles "denturist," "dental mechanic," and "certified dental mechanic" are reserved for individuals registered under the Act.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF REGISTERED DENTURISTS, ALBERTA, 1988

Census Division (Major Urban Centre)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	4	57,400	1:14,350
2 (Lethbridge)	13	115,800	1:8,908
3 (Pincher Creek)	1	35,400	1:35,400
4 (Hanna)	0	12,300	—
5 (Drumheller)	4	38,700	1:9,675
6 (Calgary excluding CMA)	1	38,058	1:38,058
7 (Stettler)	3	40,900	1:13,633
8 (Red Deer)	12	119,200	1:9,933
9 (Rocky Mountain House)	1	16,300	1:16,300
10 (Camrose)	10	79,100	1:7,910
11 (Edmonton excluding CMA)	1	30,227	1:30,227
12 (Bonnyville)	2	45,800	1:22,900
13 (Whitecourt)	2	55,300	1:27,650
14 (Hinton)	2	24,800	1:12,400
15 (Banff)	1	22,900	1:22,900
16 (Fort McMurray)	3	48,700	1:16,233
17 (High Level)	1	50,600	1:50,600
18 (Grande Cache)	0	12,500	—
19 (Grande Prairie)	4	72,100	1:18,025
Census Metropolitan Area (CMA) of Calgary	50	693,142[3]	1:13,863
Census Metropolitan Area (CMA) of Edmonton	86	785,673[3]	1:9,136
Location Unknown	1	—	—
PROVINCIAL TOTAL	**202**	**2,395,000**	**1:11,856**

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[1] Source: The Board of Examiners for Certified Dental Mechanics, Alberta Professions and Occupations Bureau. Number of denturists registered with the Board and residing in Alberta as of December 31, 1988. Number includes denturists who were also dental technicians.

[2] Source: "(Preliminary) Population Estimates by Census Division, Alberta, 1988," Alberta Bureau of Statistics, June 1989.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

TABLE 1B
COMMUNITY BREAKDOWN OF REGISTERED DENTURISTS, ALBERTA, 1988

Community by Population Size	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	50	693,142[3]	1:13,863
Census Metropolitan Area (CMA) of Edmonton	86	785,673[3]	1:9,136
10,000 to 69,999			
Camrose	4	12,968	1:3,242
Fort McMurray	2	34,949	1:17,475
Grande Prairie	1	26,648	1:26,648
Lethbridge	9	60,610	1:6,734
Lloydminster	1	10,201	1:10,201
Medicine Hat	4	42,290	1:10,573
Red Deer	8	54,839	1:6,855
Wetaskiwin	0	10,103	—
5,000 to 9,999			
Bonnyville	1	5,575	1:5,575
Brooks	0	9,464	—
Crowsnest Pass	1	6,912	1:6,912
Drumheller	2	6,366	1:3,183
Edson	1	7,323	1:7,323
High River	1	5,096	1:5,096
Hinton	1	8,846	1:8,846
Innisfail	1	5,535	1:5,535
Lacombe	1	6,110	1:6,110
Okotoks	0	5,666	—
Olds	0	5,004	—
Peace River	2	6,355	1:3,178
Ponoka	2	5,473	1:2,737
Rocky Mountain House	1	5,261	1:5,261
Slave Lake	0	5,611	—
St. Paul	1	5,128	1:5,128
Stettler	2	5,147	1:2,574
Taber	1	6,382	1:6,382
Vegreville	1	5,276	1:5,276
Whitecourt	0	6,126	—
Under 5,000	17	540,921	1:31,819
Location Unknown	1	—	—
PROVINCIAL TOTAL	**202**	**2,395,000[4]**	**1:11,856**

---

[1] Source: The Board of Examiners for Certified Dental Mechanics, Alberta Professions and Occupations Bureau. Number of denturists registered with the Board and residing in Alberta as of December 31, 1988. Number includes denturists who were also dental technicians.

[2] Source: "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[4] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

TABLE 2
SELECTED MANPOWER STATISTICS FOR DENTURISTS IN ALBERTA, 1986, 1987, AND 1988

	1986	1987	1988
Number of Registered Personnel[1]	188	201	202
% Change in Number of Registered Personnel	4.4%	6.9%	0.5%
Population (Alberta)[2]	2,375,100	2,377,700	2,395,000
% Change in Population	1.1%	0.1%	0.7%
Personnel-to-Population Ratios:			
– Alberta	1:12,634	1:11,829	1:11,856

IV. Educational Programs

As a result of the 1988 amendment to the regulation governing denturists, individuals who wish to practise as denturists must now complete a formal education course of studies. In Alberta, this training consists of a two-year program in denturist technology offered by the Northern Alberta Institute of Technology. Graduates are then required to apprentice for two years under the supervision of a certified denturist and to pass a comprehensive examination. The diploma program produced 15 graduates in 1987-88. The number of newly-certified denturists in 1988 was five.

TABLE 3
EDUCATIONAL PROGRAM FOR DENTURISTS IN ALBERTA[3]

	1985-86	1986-87	1987-88
DENTURIST TECHNOLOGY DIPLOMA			
Northern Alberta Institute of Technology			
(Program Length: 2 years)			
Enrolments:			
1st Year	18	18	18
2nd Year	18	18	18
Graduates:	12	15	15

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[1] Source: The Board of Examiners for Certified Dental Mechanics, Alberta Professions and Occupations Bureau. Number of denturists registered with the Board and residing in Alberta as of December 31 of the indicated year.

[2] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

[3] Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1988.

Dietary Technologists

I. Overview

Definition: Assist in planning and supervising food service programs in governmental, institutional and commercial establishments. Plan menus and diets, under direction of dietitian or nutritionist, to provide required food and nutrients to individuals and groups. Arrange work schedules and assist in supervision of those engaged in preparation and serving of meals. Purchase or requisition food, equipment and other supplies. Maintain food-cost-control and other operational records to assist in improving efficiency and quality of food service system. Inspect storage facilities and work areas to ensure observance of sanitation, safety and security standards. Maintain attendance and personnel records and assist with inventory of supplies and equipment.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

Since registration with the Alberta Society of Dietary Technologists is not mandatory, and since some dietary technologists are employed outside of health and social services, the survey of health and social service personnel working in Alberta, conducted on March 31, 1988 by the Alberta Health and Social Services Disciplines Committee, was used as the source of manpower information.

There were 253 dietary technologists practising in the health and social service sector in Alberta in 1988.[1] Of these, 65 percent were employed in acute care hospitals, 13 percent in auxiliary hospitals and 14 percent in nursing homes.[2] Dietary technologists employed in the Census Metropolitan Areas of Calgary and Edmonton accounted for 53 percent of the total. The provincial dietary technologist-to-population ratio was 1:9,466 in 1988.

II. Professional Association and Legislation Information

a) Licensing, Registration or Certification Authority:

None.

b) Professional Association:

Alberta Dietary Technologists Association
P.O. Box 3791, Station "D" or P.O. Box 2353
Edmonton, Alberta
T5L 4J8

Calgary, Alberta
T2P 2M6

President: Ms. Rosemary Jacobsen

c) Legislation:

There is no legislation regulating dietary technologists in Alberta at present.

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1988," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Ibid.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF PRACTISING DIETARY TECHNOLOGISTS, ALBERTA, 1988

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	7	57,400	1:8,200
2 (Lethbridge)	13	115,800	1:8,908
3 (Pincher Creek)	4	35,400	1:8,850
4 (Hanna)	0	12,300	—
5 (Drumheller)	6	38,700	1:6,450
6 (Calgary excluding CMA)	3	38,058	1:12,686
7 (Stettler)	5	40,900	1:8,180
8 (Red Deer)	19	119,200	1:6,274
9 (Rocky Mountain House)	0	16,300	—
10 (Camrose)	13	79,100	1:6,085
11 (Edmonton excluding CMA)	3	30,227	1:10,076
12 (Bonnyville)	6	45,800	1:7,633
13 (Whitecourt)	7	55,300	1:7,900
14 (Hinton)	2	24,800	1:12,400
15 (Banff)	5	22,900	1:4,580
16 (Fort McMurray)	3	48,700	1:16,233
17 (High Level)	4	50,600	1:12,650
18 (Grande Cache)	2	12,500	1:6,250
19 (Grande Prairie)	16	72,100	1:4,506
Census Metropolitan Area (CMA) of Calgary	59	693,142[3]	1:11,748
Census Metropolitan Area (CMA) of Edmonton	76	785,673[3]	1:10,338
PROVINCIAL TOTAL	**253**	**2,395,000**	**1:9,466**

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1988," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "(Preliminary) Population Estimates by Census Division, Alberta, 1988," Alberta Bureau of Statistics, June 1989.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

TABLE 1B
COMMUNITY BREAKDOWN OF PRACTISING DIETARY TECHNOLOGISTS, ALBERTA, 1988

Community by Population Size	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	59	693,142[3]	1:11,748
Census Metropolitan Area (CMA) of Edmonton	76	785,673[3]	1:10,338
10,000 to 69,999			
Camrose	1	12,968	1:12,968
Fort McMurray	2	34,949	1:17,475
Grande Prairie	6	26,648	1:4,441
Lethbridge	7	60,610	1:8,659
Lloydminster	5	10,201	1:2,040
Medicine Hat	6	42,290	1:7,048
Red Deer	11	54,839	1:4,985
Wetaskiwin	3	10,103	1:3,368
5,000 to 9,999			
Bonnyville	1	5,575	1:5,575
Brooks	1	9,464	1:9,464
Crowsnest Pass	2	6,912	1:3,456
Drumheller	1	6,366	1:6,366
Edson	1	7,323	1:7,323
High River	2	5,096	1:2,548
Hinton	1	8,846	1:8,846
Innisfail	1	5,535	1:5,535
Lacombe	0	6,110	—
Okotoks	0	5,666	—
Olds	0	5,004	—
Peace River	3	6,355	1:2,118
Ponoka	5	5,473	1:1,095
Rocky Mountain House	0	5,261	—
Slave Lake	0	5,611	—
St. Paul	3	5,128	1:1,709
Stettler	0	5,147	—
Taber	1	6,382	1:6,382
Vegreville	0	5,276	—
Whitecourt	1	6,126	1:6,126
Under 5,000	54	540,921	1:10,017
PROVINCIAL TOTAL	**253**	**2,395,000[4]**	**1:9,466**

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1988," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[4] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

TABLE 2
SELECTED MANPOWER STATISTICS FOR DIETARY TECHNOLOGISTS IN ALBERTA, 1986, 1987, AND 1988

	1986	1987	1988
Number of Practising Personnel[1]	248	261	253
% Change in Number of Practising Personnel	0.0%	5.2%	-3.1%
Population (Alberta)[2]	2,375,100	2,377,700	2,395,000
% Change in Population	1.1%	0.1%	0.7%
Personnel-to-Population Ratios:			
– Alberta	1:9,577	1:9,110	1:9,466

IV. Educational Programs

Both the Northern Alberta Institute of Technology and the Southern Alberta Institute of Technology offer a two-year program to train dietary technologists. The two programs together produced 51 graduates in 1987-88.

TABLE 3
EDUCATIONAL PROGRAMS FOR DIETARY TECHNOLOGISTS IN ALBERTA[3]

	1985-86	1986-87	1987-88
DIETARY TECHNOLOGY DIPLOMA			
Northern Alberta Institute of Technology (Program Length: 2 years)			
Enrolments:			
1st Year	25	26	25
2nd Year	25	19	24
Graduates:	22	17	22
Southern Alberta Institute of Technology (Program Length: 2 years)			
Enrolments:			
1st Year	42	42	41
2nd Year	28	31	35
Graduates:	23	28	29
PROVINCIAL TOTAL			
Number of Training Programs: 2			
Graduates:	45	45	51

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[1] Sources: "Health and Social Service Personnel Working in Alberta, March 31," 1986, 1987 and 1988 editions, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

[3] Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1988.

Dietitians/Nutritionists

I. Overview

Definition: Dietitians

Plan and supervise food service programs in governmental, institutional and commercial establishments to provide nutritionally adequate quality food. Plan diets and menus and evaluate clients' acceptance. Plan and submit budget and manage and control operating costs. Establish and maintain standards of food production and service, sanitation, safety and security. Supervise workers and direct efficient use of personnel and equipment. Institute measures to improve efficiency and quality of food service system. Plan, conduct and evaluate orientation and in-service training programs. Determine food, equipment and supply requirements. Administer established personnel policies. Plan layout designs and determine equipment requirements for new or renovated food services facilities. Prepare material on nutritional value of foods, methods of preparation and recipes, if required.

Nutritionists

Provide consulting services to the community and organize, plan and conduct programs concerning nutrition to assist in promotion of health and prevention of disease. Assess nutritional needs and available resources of community. Develop and implement community programs concerning nutrition. Advise health and other agencies on nutritional and food services standards of their food programs. Counsel individuals and families in nutritional principles, diet, food selection and economical buying practices. Interpret and evaluate current research relating to nutrition and food service systems management to public and to staff. Conduct or participate in in-service education. Plan, conduct and evaluate nutrition education programs for public. Prepare technical publications and publications for the public concerning food and nutrition. Plan, conduct and evaluate dietary studies and participate in studies of diseases with nutrition component. Plan or participate in funding programs and recommend budget. Manage and control financial resources.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

There were 379 dietitians/nutritionists who resided in Alberta and registered with the Alberta Registered Dietitians Association (ARDA) in 1988.[1] Not all registered dietitians/nutritionists practise in the health care and social service sector. According to a manpower survey conducted by the Alberta Health and Social Services Disciplines Committee, there were 302 dietitians and nutritionists employed in health and social service agencies and institutions in 1988.[2] Of these, 56 percent were employed in acute care hospitals, 15 percent in nursing homes and 10 percent in auxiliary hospitals.[3]

Registered dietitians/nutritionists located in the Census Metropolitan Areas of Calgary and Edmonton accounted for 80 percent of all those registered. The number of registered dietitians/nutritionists increased by 3.6 percent between 1986 and 1988, while the provincial population increased by 0.8 percent during the same period. The registered dietitian/nutritionist- to-population ratio was 1:6,319 in Alberta in 1988.

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[1] Source: Alberta Registered Dietitians Association. Number of dietitians/nutritionists registered with the ARDA and residing in Alberta as of April 30, 1988.

[2] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1988," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[3] Ibid.

II. Professional Association and Legislation Information

a) Professional Association/Registration Body:

Alberta Registered Dietitians Association

P.O. Box 3874, Station D	or	P.O. Box 2208, Station M
Edmonton, Alberta		Calgary, Alberta
T5L 4K1		T2P 2M4

President: Ms. Barbara Riley

b) Legislation:

Although there is no mandatory registration requirement under the Registered Dietitians Act for dietitians/nutritionists in order to practise in the province, only dietitians/nutritionists who are registered with the Alberta Registered Dietitians Association (ARDA) may use the title of "registered dietitian."

In addition to registration functions, the ARDA is responsible for regulating the conduct of its members and maintaining professional discipline. The Universities Coordinating Council evaluates the educational qualifications while the professional association evaluates the practical experience required for registration.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF REGISTERED DIETITIANS/NUTRITIONISTS, ALBERTA, 1988

Census Division (Major Urban Centre)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	6	57,400	1:9,567
2 (Lethbridge)	9	115,800	1:12,867
3 (Pincher Creek)	6	35,400	1:5,900
4 (Hanna)	1	12,300	1:12,300
5 (Drumheller)	2	38,700	1:19,350
6 (Calgary excluding CMA)	4	38,058	1:9,515
7 (Stettler)	1	40,900	1:40,900
8 (Red Deer)	17	119,200	1:7,012
9 (Rocky Mountain House)	1	16,300	1:16,300
10 (Camrose)	7	79,100	1:11,300
11 (Edmonton excluding CMA)	3	30,227	1:10,076
12 (Bonnyville)	4	45,800	1:11,450
13 (Whitecourt)	6	55,300	1:9,217
14 (Hinton)	1	24,800	1:24,800
15 (Banff)	1	22,900	1:22,900
16 (Fort McMurray)	3	48,700	1:16,233
17 (High Level)	1	50,600	1:50,600
18 (Grande Cache)	0	12,500	—
19 (Grande Prairie)	3	72,100	1:24,033
Census Metropolitan Area (CMA) of Calgary	138[3]	693,142[4]	1:5,023
Census Metropolitan Area (CMA) of Edmonton	165[3]	785,673[4]	1:4,762
PROVINCIAL TOTAL	**379**	**2,395,000**	**1:6,319**

---

[1] Source: Alberta Registered Dietitians Association. Number of dietitians/nutritionists registered with the ARDA and residing in Alberta as of April 30, 1988.

[2] Source: "(Preliminary) Population Estimates by Census Division, Alberta, 1988," Alberta Bureau of Statistics, June 1989.

[3] The figures for CMA Calgary and CMA Edmonton are estimated.

[4] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

TABLE 1B
COMMUNITY BREAKDOWN OF REGISTERED DIETITIANS/NUTRITIONISTS, ALBERTA, 1988

Community by Population Size	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	138[3]	693,142[4]	1:5,023
Census Metropolitan Area (CMA) of Edmonton	165[3]	785,673[4]	1:4,762
10,000 to 69,999			
Camrose	2	12,968	1:6,484
Fort McMurray	3	34,949	1:11,650
Grande Prairie	2	26,648	1:13,324
Lethbridge	8	60,610	1:7,576
Lloydminster	0	10,201	—
Medicine Hat	6	42,290	1:7,048
Red Deer	14	54,839	1:3,917
Wetaskiwin	2	10,103	1:5,052
5,000 to 9,939			
Bonnyville	1	5,575	1:5,575
Brooks	0	9,464	—
Crowsnest Pass	0	6,912	—
Drumheller	1	6,366	1:6,366
Edson	1	7,323	1:7,323
High River	1	5,096	1:5,096
Hinton	0	8,846	—
Innisfail	0	5,535	—
Lacombe	1	6,110	1:6,110
Okotoks	0	5,666	—
Olds	2	5,004	1:2,502
Peace River	1	6,355	1:6,355
Ponoka	1	5,473	1:5,473
Rocky Mountain House	1	5,261	1:5,261
Slave Lake	0	5,611	—
St. Paul	0	5,128	—
Stettler	0	5,147	—
Taber	0	6,382	—
Vegreville	1	5,276	1:5,276
Whitecourt	1	6,126	1:6,126
Under 5,000	27	540,921	1:20,034
PROVINCIAL TOTAL	**379**	**2,395,000[5]**	**1:6,319**

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[1] Source: Alberta Registered Dietitians Association. Number of dietitians/nutritionists registered with the ARDA and residing in Alberta as of April 30, 1988.

[2] Source: "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[3] The figures for CMA Calgary and CMA Edmonton are estimated.

[4] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[5] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

TABLE 2
SELECTED MANPOWER STATISTICS FOR DIETITIANS/NUTRITIONISTS IN ALBERTA, 1986, 1987, AND 1988

	1986	1987	1988
Number of Registered Personnel[1]	366	359	379
% Change in Number of Registered Personnel	0.0%	-1.9%	5.6%
Population (Alberta)[2]	2,375,100	2,377,700	2,395,000
% Change in Population	1.1%	0.1%	0.7%
Personnel-to-Population Ratios:			
– Alberta	1:6,489	1:6,623	1:6,319

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[1] Source: Alberta Registered Dietitians Association. Number of dietitians/nutritionists registered with the ARDA and residing in Alberta as of April 30 of the indicated year.

[2] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

IV. Educational Programs

The Faculty of Home Economics at the University of Alberta offers a four-year baccalaureate degree program with a major in foods and nutrition. The program produced 30 graduates in 1987-88. The University of Alberta also offers separate master's degree programs in both foods and nutrition. There were four graduates from these two programs in 1987-88. In addition to post-secondary training, individuals must complete a dietetic internship in order to qualify as a registered dietitian.

TABLE 3
EDUCATIONAL PROGRAMS FOR DIETITIANS/NUTRITIONISTS IN ALBERTA[1]

	1985-86	1986-87	1987-88
A. BACCALAUREATE PROGRAM			
University of Alberta			
Home Economics: Foods and Nutrition			
(Program Length: 4 years)			
Enrolments:			
1st Year	33	51	54
2nd Year	41	48	53
3rd Year	51	37	37
4th Year	50	54	41
Graduates:	17	32	30
B. MASTER'S PROGRAMS			
University of Alberta			
Home Economics: Foods			
(Program Length: 2 years)			
Enrolments:	5	5	8
Graduates:	—	1	2
University of Alberta			
Home Economics: Nutrition			
(Program Length: 2 years)			
Enrolments:	14	9	16
Graduates:	2	3	2
PROVINCIAL TOTAL			
Number of M.Sc. Programs: 2			
Graduates:	2	4	4

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[1] Source: **Alberta Health and Social Service Education Programs Inventory.** Edmonton, Alberta: Department of Advanced Education, December 1988.

Emergency Medical Technicians

I. Overview

Definition: An emergency attendant:

Gives emergency care to sick and injured persons at the scene of an accident or illness and during transport to a hospital. Assists with lifting of patient onto wheeled cart or stretcher and into and out of ambulance. Gives first aid such as mouth-to- mouth resuscitation, cardiac massage, administration of oxygen and application of bandages and splints. Assists with rescue work, if required. Performs duties of ambulance driver if required.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

Emergency medical technicians — ambulance (EMT-A) are ambulance attendants who have received training to provide emergency services at the basic life support level.[1]

In Alberta, training at the EMT-A level is provided at the Southern Alberta Institute of Technology or at the Alberta Vocational Centre at Lac La Biche.

Emergency medical technicians — paramedic (EMT-P) are ambulance attendants who have received training to provide emergency services at the advanced life support level.[2]

In Alberta, training at the EMT-P level is provided at the Northern Alberta Institute of Technology and the Southern Alberta Institute of Technology.

As of 1986, registration for emergency medical technicians — paramedic and ambulance was set out under the Health Disciplines Act.

There were 1,342 emergency medical technicians registered with the Emergency Medical Technicians (Paramedic and Ambulance) Committee of the Alberta Health Disciplines Board in 1988.[3] This is a decrease of 24 (1.8 percent) over the previous year. Of the total, 938 were classified as ambulance attendants and 404 as paramedics. Emergency medical technicians in the Census Metropolitan Areas of Calgary and Edmonton accounted for 47 percent of the total. The provincial personnel-to- population ratio was 1:1,785.

In Alberta, municipalities have the power to set the level of ambulance services beyond the legislated minimum standard. Some municipalities have established ambulance services at the advanced life support level: Airdrie, Calgary, Edmonton, Fort McMurray, Grande Prairie, High River, Innisfail, Medicine Hat, and St. Albert. This factor partly accounts for the uneven distribution of emergency medical personnel in Alberta.

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[1] "Basic life support is an emergency first aid procedure that consists of recognizing respiratory and cardiac arrest and starting the proper application of cardiopulmonary resuscitation to maintain life until a victim recovers sufficiently to be transported or until advanced life support is available." (American Heart Association, "Standards for cardiopulmonary resuscitation and emergency cardiac care." **Journal of the American Medical Association**, Vol. 227, No. 7, Supplement; 1974: p. 84).

[2] According to the American Heart Association, advanced life support for the patient in cardiac arrest consists of the following elements: basic life support, use of adjunctive equipment for ventilation and circulation, cardiac monitoring for dysrhythmia recognition and control, defibrillation, establishment and maintenance of an intravenous infusion lifeline, employment of definitive therapy, including drug administration and stabilization of the patient's condition. (American Heart Association, "Standards for cardiopulmonary resuscitation and emergency cardiac care." **Journal of the American Medical Association**, Vol. 227, No. 17, Supplement; 1974.)

[3] Emergency Medical Technicians Committee (Paramedic and Ambulance), Alberta Health Disciplines Board. Number of EMTs registered with the Board and residing in Alberta as of December 31, 1988.

II. Professional Association and Legislation Information

a) Licensing, Registration or Certification Authority:

Emergency Medical Technicians Committee
c/o Professions and Occupations Bureau
5th Floor, Kensington Place
10011 – 109 Street
Edmonton, Alberta
T5J 3S8

Chairman: Mr. Brian Winter

b) Professional Association:

Alberta Prehospital Professions Association
8711 – 50 Avenue
Edmonton, Alberta
T6E 5H4

Registrar: Mr. Dick J. Heil

c) Legislation:

There are several statutes which set standards for ambulance services and ambulance attendants.

The Motor Transport Act requires that every "Class A ambulance" in the province be staffed by at least one qualified attendant who at the minimum holds a St. John's Ambulance Certificate.

The Municipal Government Act allows municipalities to provide ambulance services which exceed the minimum standards set forth in the Motor Transport Act. Some municipalities have passed ambulance service regulations under this Act.

The Health Disciplines Act sets educational standards for individuals who practise in a discipline regulated under the Act. Emergency medical technicians, both ambulance and paramedic, have been regulated under this Act since December 31, 1985. The Emergency Medical Technicians Committee, established under the Act, is responsible for registration and discipline of members. These responsibilities will be transferred to the Alberta Prehospital Professions Association on January 1, 1989. The titles "emergency medical technician — ambulance" and "emergency medical technician — paramedic" are reserved for registered members. In addition, the Act provides a mechanism to hear complaints against a registered member, and to discipline those whose skill, judgement or conduct is unacceptable, or those who contravene the legislation.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF REGISTERED EMERGENCY MEDICAL TECHNICIANS, ALBERTA, 1988

Census Division (Major Urban Centre)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	22	57,400	1:2,609
2 (Lethbridge)	93	115,800	1:1,245
3 (Pincher Creek)	25	35,400	1:1,416
4 (Hanna)	12	12,300	1:1,025
5 (Drumheller)	26	38,700	1:1,488
6 (Calgary excluding CMA)	43	38,058	1:885
7 (Stettler)	26	40,900	1:1,573
8 (Red Deer)	115	119,200	1:1,037
9 (Rocky Mountain House)	13	16,300	1:1,254
10 (Camrose)	30	79,100	1:2,637
11 (Edmonton excluding CMA)	9	30,227	1:3,359
12 (Bonnyville)	52	45,800	1:881
13 (Whitecourt)	42	55,300	1:1,317
14 (Hinton)	15	24,800	1:1,653
15 (Banff)	30	22,900	1:763
16 (Fort McMurray)	47	48,700	1:1,036
17 (High Level)	19	50,600	1:2,663
18 (Grande Cache)	13	12,500	1:962
19 (Grande Prairie)	52	72,100	1:1,387
Census Metropolitan Area (CMA) of Calgary	324	693,142[3]	1:2,139
Census Metropolitan Area (CMA) of Edmonton	301	785,673[3]	1:2,610
Location Unknown	33	—	—
PROVINCIAL TOTAL	**1,342**	**2,395,000**	**1:1,785**

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[1] Emergency Medical Technicians Committee (Paramedic and Ambulance), Alberta Health Disciplines Board. Number of EMTs registered with the Board and residing in Alberta as of December 31, 1988.

[2] Source: "(Preliminary) Population Estimates by Census Division, Alberta, 1988," Alberta Bureau of Statistics, June 1989.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

TABLE 1B
COMMUNITY BREAKDOWN OF REGISTERED EMERGENCY MEDICAL TECHNICIANS, ALBERTA, 1988

Community by Population Size	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	324	693,142[3]	1:2,139
Census Metropolitan Area (CMA) of Edmonton	301	785,673[3]	1:2,610
10,000 to 69,999			
Camrose	7	12,968	1:1,853
Fort McMurray	31	34,949	1:1,127
Grande Prairie	16	26,648	1:1,666
Lethbridge	73	60,610	1:830
Lloydminster	1	10,201	1:10,201
Medicine Hat	20	42,290	1:2,115
Red Deer	73	54,839	1:751
Wetaskiwin	2	10,103	1:5,052
5,000 to 9,999			
Bonnyville	22	5,575	1:253
Brooks	11	9,464	1:860
Crowsnest Pass	8	6,912	1:864
Drumheller	10	6,366	1:637
Edson	3	7,323	1:2,441
High River	17	5,096	1:300
Hinton	11	8,846	1:804
Innisfail	13	5,535	1:426
Lacombe	10	6,110	1:611
Okotoks	7	5,666	1:809
Olds	6	5,004	1:834
Peace River	5	6,355	1:1,271
Ponoka	6	5,473	1:912
Rocky Mountain House	7	5,261	1:752
Slave Lake	6	5,611	1:935
St. Paul	10	5,128	1:513
Stettler	7	5,147	1:735
Taber	2	6,382	1:3,191
Vegreville	7	5,276	1:754
Whitecourt	3	6,126	1:2,042
Under 5,000	290	540,921	1:1,865
Location Unknown	33	—	—
PROVINCIAL TOTAL	**1,342**	**2,395,000[4]**	**1:1,785**

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[1] Emergency Medical Technicians Committee (Paramedic and Ambulance), Alberta Health Disciplines Board. Number of EMTs registered with the Board and residing in Alberta as of December 31, 1988.

[2] Source: "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[4] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

TABLE 2
SELECTED MANPOWER STATISTICS FOR EMERGENCY MEDICAL TECHNICIANS IN ALBERTA, 1986, 1987, AND 1988

	1986	1987	1988
Number of Registered Personnel[1]	1,007	1,366	1,342
% Change in Number of Registered Personnel	N/A	35.7%	-1.8%
Population (Alberta)[2]	2,375,100	2,377,700	2,395,000
% Change in Population	1.1%	0.1%	0.7%
Personnel-to-Population Ratios:			
– Alberta	1:2,359	1:1,741	1:1,785

IV. Educational Programs

Both the Southern Alberta Institute of Technology and the Northern Alberta Institute of Technology offer a two-year diploma program in emergency medical technology — paramedic. The two programs produced 39 graduates in 1987-88. Alberta Vocational Centre — Lac La Biche and the Southern Alberta Institute of Technology each offer a program (of varying lengths) in emergency medical technology — ambulance. The two programs produced 90 graduates in 1987-88.

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[1] Source: Emergency Medical Technicians Committee (Paramedic and Ambulance), Alberta Health Disciplines Board. Number of EMTs registered with the Board and residing in Alberta as of December 31 of the indicated year.

[2] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

TABLE 3
EDUCATIONAL PROGRAMS FOR EMERGENCY MEDICAL TECHNICIANS IN ALBERTA[1]

	1985-86	1986-87	1987-88
A. EMT — PARAMEDIC TECHNOLOGY DIPLOMA			
Northern Alberta Institute of Technology (Program Length: 2 years)			
Enrolments:			
1st Year	20	23	19
2nd Year	15	14	20
Graduates:	14	17	15
Southern Alberta Institute of Technology (Program Length: 2 years)			
Enrolments:			
1st Year	30	30	21
2nd Year	26	30	32
Graduates:	24	22	24
PROVINCIAL TOTAL			
Number of Training Programs: 2			
Graduates:	38	39	39
B. EMT — AMBULANCE TECHNOLOGY CERTIFICATE			
Alberta Vocational Centre — Lac La Biche (Program Length: Approx. 200 hours)			
Enrolments:			
1st Year	145	236	82
Graduates:	121	186	47
Southern Alberta Institute of Technology (Program Length: Approx. 250-300 hours)			
Enrolments:			
1st Year	479	398	305
Graduates:	155	127	43
PROVINCIAL TOTAL			
Number of Training Programs: 2			
Graduates:	276	313	90

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[1] Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1988.

Health Record Administrators

I. Overview

Definition: Compile and maintain medical records and statistics of hospital and clinic patients. Review clinical records for completeness and contact medical personnel to obtain missing data. Code, index and file records of diagnoses, diseases and treatments. Compile statistics such as reports on admissions, births, deaths, transfers and discharges. Release medical information to staff and authorized government agencies, insurance companies, physicians, hospitals and medical information and research centres. May brief and transcribe records. May testify in court to authenticate medical records.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

The survey of health and social service personnel working in Alberta, conducted on March 31, 1988 by the Alberta Health and Social Services Disciplines Committee, was used as the source of manpower information because data from the professional association represents both health record administrators and technicians.

There were 135 health record administrators practising in Alberta in 1988.[1] Seventy-one percent of these individuals were employed in acute care hospitals.[2] Health record administrators employed in the Census Metropolitan Areas of Calgary and Edmonton accounted for 53 percent of the total. The provincial health record administrator-to-population ratio was 1:17,741 in 1988.

II. Professional Association and Legislation Information

a) Licensing, Registration or Certification Authority:

None.

b) Professional Association:

Alberta Health Record Association
P.O. Box 1752
Edmonton, Alberta
T5J 2P1

President: Ms. Roseanne Rostaing

President Elect: Ms. Cynthia Henderson

c) Legislation:

At present, there is no legislation regulating health record administrators in Alberta. However, the professional association has applied for designation under the Health Disciplines Act.

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1988," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Ibid.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF PRACTISING HEALTH RECORD ADMINISTRATORS, ALBERTA, 1988

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	1	57,400	1:57,400
2 (Lethbridge)	8	115,800	1:14,475
3 (Pincher Creek)	0	35,400	—
4 (Hanna)	1	12,300	1:12,300
5 (Drumheller)	2	38,700	1:19,350
6 (Calgary excluding CMA)	2	38,058	1:19,029
7 (Stettler)	5	40,900	1:8,180
8 (Red Deer)	6	119,200	1:19,867
9 (Rocky Mountain House)	0	16,300	—
10 (Camrose)	10	79,100	1:7,910
11 (Edmonton excluding CMA)	2	30,227	1:15,114
12 (Bonnyville)	3	45,800	1:15,267
13 (Whitecourt)	8	55,300	1:6,913
14 (Hinton)	1	24,800	1:24,800
15 (Banff)	1	22,900	1:22,900
16 (Fort McMurray)	2	48,700	1:24,350
17 (High Level)	4	50,600	1:12,650
18 (Grande Cache)	1	12,500	1:12,500
19 (Grande Prairie)	6	72,100	1:12,017
Census Metropolitan Area (CMA) of Calgary	32	693,142[3]	1:21,661
Census Metropolitan Area (CMA) of Edmonton	40	785,673[3]	1:19,642
PROVINCIAL TOTAL	**135**	**2,395,000**	**1:17,741**

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1988," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "(Preliminary) Population Estimates by Census Division, Alberta, 1988," Alberta Bureau of Statistics, June 1989.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

TABLE 1B
COMMUNITY BREAKDOWN OF PRACTISING HEALTH RECORD ADMINISTRATORS, ALBERTA, 1988

Community by Population Size	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	32	693,142[3]	1:21,661
Census Metropolitan Area (CMA) of Edmonton	40	785,673[3]	1:19,642
10,000 to 69,999			
Camrose	2	12,968	1:6,484
Fort McMurray	0	34,949	—
Grande Prairie	1	26,648	1:26,648
Lethbridge	2	60,610	1:30,305
Lloydminster	1	10,201	1:10,201
Medicine Hat	1	42,290	1:42,290
Red Deer	3	54,839	1:18,280
Wetaskiwin	2	10,103	1:5,052
5,000 to 9,999			
Bonnyville	1	5,575	1:5,575
Brooks	4	9,464	1:2,366
Crowsnest Pass	0	6,912	—
Drumheller	1	6,366	1:6,366
Edson	0	7,323	—
High River	1	5,096	1:5,096
Hinton	1	8,846	1:8,846
Innisfail	1	5,535	1:5,535
Lacombe	1	6,110	1:6,110
Okotoks	0	5,666	—
Olds	1	5,004	1:5,004
Peace River	1	6,355	1:6,355
Ponoka	1	5,473	1:5,473
Rocky Mountain House	0	5,261	—
Slave Lake	1	5,611	1:5,611
St. Paul	1	5,128	1:5,128
Stettler	1	5,147	1:5,147
Taber	1	6,382	1:6,382
Vegreville	1	5,276	1:5,276
Whitecourt	2	6,126	1:3,063
Under 5,000	31	540,921	1:17,449
PROVINCIAL TOTAL	135	2,395,000[4]	1:17,741

---

[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1988," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[4] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

TABLE 2
SELECTED MANPOWER STATISTICS FOR
HEALTH RECORD ADMINISTRATORS
IN ALBERTA, 1986, 1987, AND 1988

	1986	1987	1988
Number of Practising Personnel[1]	145	149	135
% Change in Number of Practising Personnel	2.1%	2.8%	-9.4%
Population (Alberta)[2]	2,375,100	2,377,700	2,395,000
% Change in Population	1.1%	0.1%	0.7%
Personnel-to-Population Ratios:			
– Alberta	1:16,380	1:15,958	1:17,741

IV. Educational Programs

The Northern Alberta Institute of Technology offers a two-year health records administration diploma program. The program produced 15 graduates in 1987-88.

TABLE 3
EDUCATIONAL PROGRAM FOR
HEALTH RECORD ADMINISTRATORS IN ALBERTA[3]

	1985-86	1986-87	1987-88
HEALTH RECORD ADMINISTRATION DIPLOMA			
Northern Alberta Institute of Technology			
(Program Length: 2 years)			
Enrolments:			
1st Year	16	16	17
2nd Year	16	13	14
Graduates:	16	12	15

---

[1] Sources: "Health and Social Service Personnel Working in Alberta, March 31," 1986, 1987 and 1988 editions, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

[3] Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1988.

Health Record Technicians

I. Overview

Definition: Assist health record administrators, carry out many technical activities within the medical record department, typing medical information, preparing statistical reports, reviewing medical records, supervising clerical personnel, working with doctors, nurses and other health professionals on medical research projects.

(Source: **Health Manpower Provincial Report, Manitoba, 1982.** Winnipeg, Manitoba: Manitoba Department of Health, 1982)

The survey of health and social service personnel working in Alberta, conducted on March 31, 1988 by the Alberta Health and Social Services Disciplines Committee, was used as the source of manpower information because data from the professional association represents both health record administrators and technicians.

There were 347 health record technicians practising in Alberta in 1988.[1] Of these, 73 percent were employed in acute care hospitals.[2] Health record technicians employed in the Census Metropolitan Areas of Calgary and Edmonton accounted for almost half (47%) of the total. The provincial health record technician-to-population ratio was 1:6,902 in 1988.

II. Professional Association and Legislation Information

a) Licensing, Registration or Certification Authority:

None.

b) Professional Association:

Alberta Health Record Association
P.O. Box 1752
Edmonton, Alberta
T5J 2P1

President: Ms. Roseanne Rostaing

President Elect: Ms. Cynthia Henderson

c) Legislation:

At present, there is no legislation regulating health record technicians in Alberta. However, the professional association has applied for designation and regulation under the Health Disciplines Act.

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1988," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Ibid.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF PRACTISING HEALTH RECORD TECHNICIANS, ALBERTA, 1988

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	12	57,400	1:4,783
2 (Lethbridge)	12	115,800	1:9,650
3 (Pincher Creek)	10	35,400	1:3,540
4 (Hanna)	5	12,300	1:2,460
5 (Drumheller)	7	38,700	1:5,529
6 (Calgary excluding CMA)	11	38,058	1:3,460
7 (Stettler)	9	40,900	1:4,544
8 (Red Deer)	30	119,200	1:3,973
9 (Rocky Mountain House)	5	16,300	1:3,260
10 (Camrose)	22	79,100	1:3,595
11 (Edmonton excluding CMA)	5	30,227	1:6,045
12 (Bonnyville)	11	45,800	1:4,164
13 (Whitecourt)	11	55,300	1:5,027
14 (Hinton)	4	24,800	1:6,200
15 (Banff)	5	22,900	1:4,580
16 (Fort McMurray)	4	48,700	1:12,175
17 (High Level)	4	50,600	1:12,650
18 (Grande Cache)	3	12,500	1:4,167
19 (Grande Prairie)	13	72,100	1:5,546
Census Metropolitan Area (CMA) of Calgary	76	693,142[3]	1:9,120
Census Metropolitan Area (CMA) of Edmonton	88	785,673[3]	1:8,928
PROVINCIAL TOTAL	**347**	**2,395,000**	**1:6,902**

---

[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1988," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "(Preliminary) Population Estimates by Census Division, Alberta, 1988," Alberta Bureau of Statistics, June 1989.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

TABLE 1B
COMMUNITY BREAKDOWN OF PRACTISING HEALTH RECORD TECHNICIANS, ALBERTA, 1988

Community by Population Size	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	76	693,142[3]	1:9,120
Census Metropolitan Area (CMA) of Edmonton	88	785,673[3]	1:8,928
10,000 to 69,999			
Camrose	5	12,968	1:2,594
Fort McMurray	2	34,949	1:17,475
Grande Prairie	4	26,648	1:6,662
Lethbridge	6	60,610	1:10,102
Lloydminster	1	10,201	1:10,201
Medicine Hat	10	42,290	1:4,229
Red Deer	19	54,839	1:2,886
Wetaskiwin	5	10,103	1:2,021
5,000 to 9,999			
Bonnyville	2	5,575	1:2,788
Brooks	0	9,464	—
Crowsnest Pass	2	6,912	1:3,456
Drumheller	2	6,366	1:3,183
Edson	3	7,323	1:2,441
High River	3	5,096	1:1,699
Hinton	1	8,846	1:8,846
Innisfail	2	5,535	1:2,768
Lacombe	1	6,110	1:6,110
Okotoks	0	5,666	—
Olds	3	5,004	1:1,668
Peace River	2	6,355	1:3,178
Ponoka	4	5,473	1:1,368
Rocky Mountain House	5	5,261	1:1,052
Slave Lake	0	5,611	—
St. Paul	1	5,128	1:5,128
Stettler	1	5,147	1:5,147
Taber	2	6,382	1:3,191
Vegreville	2	5,276	1:2,638
Whitecourt	1	6,126	1:6,126
Under 5,000	94	540,921	1:5,754
PROVINCIAL TOTAL	**347**	**2,395,000[4]**	**1:6,902**

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1988," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[4] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

TABLE 2
SELECTED MANPOWER STATISTICS FOR HEALTH RECORD TECHNICIANS IN ALBERTA, 1986, 1987, AND 1988

	1986	1987	1988
Number of Practising Personnel[1]	279	293	347
% Change in Number of Practising Personnel	-7.9%	5.0%	18.4%
Population (Alberta)[2]	2,375,100	2,377,700	2,395,000
% Change in Population	1.1%	0.1%	0.7%
Personnel-to-Population Ratios:			
– Alberta	1:8,513	1:8,115	1:6,902

IV. Educational Programs

The Southern Alberta Institute of Technology (SAIT) offers a 12-month health record technician certificate program. The program produced 13 graduates in 1987-88.

TABLE 3
EDUCATIONAL PROGRAM FOR HEALTH RECORD TECHNICIANS IN ALBERTA[3]

	1985-86	1986-87	1987-88
HEALTH RECORD TECHNICIAN CERTIFICATE			
Southern Alberta Institute of Technology (Program Length: 12 months)			
Enrolments:	25	25	25
Graduates:	12	16	13

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[1] Sources: "Health and Social Service Personnel Working in Alberta, March 31," 1986, 1987 and 1988 editions, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

[3] Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1988.

Medical Laboratory Technologists

I. Overview

Definition: Perform medical laboratory tests, procedures, experiments and analyses for the diagnosis, treatment and prevention of disease. Conduct chemical analysis of blood, urine, cerebro-spinal and other body fluids to ascertain normal and abnormal constituents. Study blood cells, their numbers, morphological characteristics and coagulation factors related to various physiological and pathological conditions. Prepare tissue sections for microscopic examination using fixation, imbedding, cutting and staining techniques to demonstrate special cellular tissue elements or other characteristics. Study micro-organisms which cause disease and their effect upon the human body, using a variety of microscopic and macroscopic techniques. Perform blood group, type and compatibility tests for transfusion purposes. Investigate responses of body to foreign cells or agents.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

Since registration with the Alberta branch of the Canadian Society of Laboratory Technologists is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1988 by the Alberta Health and Social Services Disciplines Committee, was used as an alternative source of manpower information.

There were 2,408 medical laboratory technologists practising in Alberta in 1988.[1] About half (51%) of these individuals were employed in acute care hospitals and 38 percent worked in medical laboratories and x-ray facilities.[2] Medical laboratory technologists employed in the Census Metropolitan Areas of Calgary and Edmonton accounted for 78 percent of the total. The provincial medical laboratory technologist-to-population ratio was 1:995 in 1988.

Some of the basic laboratory services provided by medical laboratory technologists are provided by combined laboratory and x-ray technicians, especially in small rural hospitals (see chapter on Combined Laboratory and X-Ray Technicians).

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1988," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Ibid.

II. Professional Association and Legislation Information

a) **Licensing, Registration or Certification Authority:**
None.

b) **Professional Association:**
Alberta Society of Medical Laboratory Technologists
Box 4165
Edmonton, Alberta
T6E 4T2

President: Ms. Bonnie Reib

c) **Legislation:**
There is no legislation regulating medical laboratory technologists in Alberta at present. However, the professional association has applied for designation under the Health Disciplines Act.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF PRACTISING MEDICAL LABORATORY TECHNOLOGISTS, ALBERTA, 1988

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	46	57,400	1:1,248
2 (Lethbridge)	103	115,800	1:1,124
3 (Pincher Creek)	12	35,400	1:2,950
4 (Hanna)	1	12,300	1:12,300
5 (Drumheller)	15	38,700	1:2,580
6 (Calgary excluding CMA)	15	38,058	1:2,537
7 (Stettler)	20	40,900	1:2,045
8 (Red Deer)	85	119,200	1:1,402
9 (Rocky Mountain House)	3	16,300	1:5,433
10 (Camrose)	49	79,100	1:1,614
11 (Edmonton excluding CMA)	17	30,227	1:1,778
12 (Bonnyville)	21	45,800	1:2,181
13 (Whitecourt)	17	55,300	1:3,253
14 (Hinton)	12	24,800	1:2,067
15 (Banff)	14	22,900	1:1,636
16 (Fort McMurray)	29	48,700	1:1,679
17 (High Level)	9	50,600	1:5,622
18 (Grande Cache)	5	12,500	1:2,500
19 (Grande Prairie)	51	72,100	1:1,414
Census Metropolitan Area (CMA) of Calgary	798	693,142[3]	1:869
Census Metropolitan Area (CMA) of Edmonton	1,086	785,673[3]	1:723
PROVINCIAL TOTAL	**2,408**	**2,395,000**	**1:995**

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1988," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "(Preliminary) Population Estimates by Census Division, Alberta, 1988," Alberta Bureau of Statistics, June 1989.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

TABLE 1B
COMMUNITY BREAKDOWN OF PRACTISING MEDICAL LABORATORY TECHNOLOGISTS, ALBERTA, 1988

Community by Population Size	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	798	693,142[3]	1:869
Census Metropolitan Area (CMA) of Edmonton	1,086	785,673[3]	1:723
10,000 to 69,999			
Camrose	13	12,968	1:998
Fort McMurray	23	34,949	1:1,520
Grande Prairie	32	26,648	1:833
Lethbridge	85	60,610	1:713
Lloydminster	11	10,201	1:927
Medicine Hat	43	42,290	1:983
Red Deer	72	54,839	1:762
Wetaskiwin	17	10,103	1:594
5,000 to 9,999			
Bonnyville	6	5,575	1:929
Brooks	7	9,464	1:1,352
Crowsnest Pass	0	6,912	—
Drumheller	9	6,366	1:707
Edson	5	7,323	1:1,465
High River	6	5,096	1:849
Hinton	7	8,846	1:1,264
Innisfail	1	5,535	1:5,535
Lacombe	6	6,110	1:1,018
Okotoks	1	5,666	1:5,666
Olds	4	5,004	1:1,251
Peace River	9	6,355	1:706
Ponoka	4	5,473	1:1,368
Rocky Mountain House	3	5,261	1:1,754
Slave Lake	2	5,611	1:2,806
St. Paul	4	5,128	1:1,282
Stettler	6	5,147	1:858
Taber	9	6,382	1:709
Vegreville	9	5,276	1:586
Whitecourt	3	6,126	1:2,042
Under 5,000	127	540,921	1:4,259
PROVINCIAL TOTAL	**2,408**	**2,395,000[4]**	**1:995**

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1988," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[4] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

TABLE 2
SELECTED MANPOWER STATISTICS FOR MEDICAL LABORATORY TECHNOLOGISTS IN ALBERTA, 1986, 1987, AND 1988

	1986	1987	1988
Number of Practising Personnel[1]	2,207	2,294	2,408
% Change in Number of Practising Personnel	3.4%	3.9%	5.0%
Population (Alberta)[2]	2,375,100	2,377,700	2,395,000
% Change in Population	1.1%	0.1%	0.7%
Personnel-to-Population Ratios:			
– Alberta	1:1,076	1:1,036	1:995
– Western Canada[3]	1:1,113	—	—

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[1] Sources: "Health and Social Service Personnel Working in Alberta, March 31," 1986, 1987 and 1988 editions, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

[3] Source: Ratio for the provinces of Manitoba, Saskatchewan, Alberta and British Columbia combined derived from, **Health Personnel in Canada — 1987**. Ottawa, Ontario: Department of National Health and Welfare, December 1988.

IV. Educational Programs

Both the Northern Alberta Institute of Technology and the Southern Alberta Institute of Technology, in cooperation with a number of hospitals in Edmonton, Calgary, Red Deer and Lethbridge, offer a two-year medical laboratory technology diploma program. Together, the two programs produced 109 graduates in 1987-88. In addition, the University of Alberta offers a four-year bachelor of science program in medical laboratory science. This program produced 23 graduates in 1987-88.

TABLE 3
EDUCATIONAL PROGRAMS FOR MEDICAL LABORATORY TECHNOLOGISTS IN ALBERTA[1]

	1985-86	1986-87	1987-88
A. DIPLOMA PROGRAMS			
Northern Alberta Institute of Technology (Program Length: 2 years)			
Enrolments:			
1st Year	74	70	77
2nd Year	59	67	64
Graduates:	59	67	61
Southern Alberta Institute of Technology (Program Length: 2 years)			
Enrolments:			
1st Year	52	54	48
2nd Year	40	50	50
Graduates:	37	41	48
PROVINCIAL TOTAL			
Number of Diploma Programs: 2			
Graduates:	96	108	109
B. BACCALAUREATE PROGRAM			
University of Alberta (Program Length: 4 years)			
Enrolments:			
1st Year	36	35	35
2nd Year	28	25	26
3rd Year	22	21	22
4th Year	21	22	23
Graduates:	21	22	23

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[1] Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1988.

Medical Radiation Technologists

I. Overview

Definition: **Radiographic Technologists**

Operate radiography equipment to produce pictures of body structures for diagnostic purposes. Explain treatment and reassure patients. Prepare drugs and chemicals for radiologist. Position patient according to part of body being x-rayed. Affix shields to protect unaffected areas of patient from radiation. Adjust equipment controls to collimate beam, to regulate length and intensity of x-ray exposure and to expose film. Process and prepare films for interpretation by radiologist. Assist radiologist in fluoroscopy, cinefluoroscopy and other diagnostic procedures. Operate radiography equipment in operating theatre or other specialized area to assist physician or surgeon.

Radiation Oncology Technologists

Administer radiation treatment to patients as prescribed by radiation oncologist. Explain treatment and reassure patients. Position patient according to part of body being treated. Affix shields to protect unaffected areas of patient from radiation. Adjust equipment controls to collimate beam. Observe patient through window or on closed circuit television during treatment. Notify radiation oncologist if medical problems arise. Assist clinical physicist to prepare patient's treatment plan according to radiation oncologist's prescription. Process or assist in preparation of sealed radioactive substances for surface application or insertion into body cavities.

Nuclear Medicine Technologists

Prepare radioactive solutions and reagents and operate scanning equipment for diagnostic purposes. Perform assays and quality-control tests on radioactive materials. Calculate doses to be administered by physician. Position patient and calibrate scanning equipment. Operate radiation-scanning equipment to produce photographic image of irradiated area. Calculate blood volume and red-cell survival, using geiger counter, electroscope, scaler, scintillation and position scanner and scintogram. Monitor oscilloscope images and study photographic images to determine if further scanning is required. Perform radioisotope scanning of pathological specimens and blood samples.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

Medical radiation technologists have been regulated under the Health Disciplines Act since January 1, 1986.

Beginning in February 1988, the professional association assumed responsibility for registration and discipline of its members.

There were 1,263 medical radiation technologists registered with the Alberta Association of Medical Radiation Technologists in 1988. Of these, 1,103 were radiographic technologists, 90 were nuclear medicine technologists and 63 were radiation oncology technologists. Seven individuals were qualified in more than one specialty.[1] Medical radiation technologists in the Census Metropolitan Areas of Calgary and Edmonton accounted for 69 percent of the total. All radiation oncology technologists are employed in Edmonton or Calgary at the Cross Cancer Institute or the Tom Baker Cancer Centre. The provincial personnel-to- population ratio was 1:1,896 in 1988.

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[1] Source: Alberta Association of Medical Radiation Technologists. Number of medical radiation technologists registered with the Association and residing in Alberta as of December 31, 1988.

Some of the basic x-ray services performed by medical radiation technologists are provided by combined laboratory and x-ray technicians, especially in small rural hospitals (see chapter on Combined Laboratory and X-Ray Technicians).

II. Professional Association and Legislation Information

a) Professional Association/Registration Board:

Alberta Association of Medical Radiation Technologists
Suite #1, 2nd Floor
2210 – 39 Street North
Lethbridge, Alberta
T1H 5J2

President: Mr. Larry Curtis

b) Legislation:

Regulations under the Health Disciplines Act set educational standards for registration and procedures for discipline of medical radiation technologists. These regulations also reserve the titles "medical radiation technologist," "nuclear medicine technologist," "radiation oncology technologist" and "radiographic technologist" for individuals registered under the Act. The Alberta Association of Medical Radiation Technologists is responsible for registration and investigation of complaints against members.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF REGISTERED MEDICAL RADIATION TECHNOLOGISTS, ALBERTA, 1988

Census Division (Major Urban Centre)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	15	57,400	1:3,827
2 (Lethbridge)	56	115,800	1:2,068
3 (Pincher Creek)	13	35,400	1:2,723
4 (Hanna)	2	12,300	1:6,150
5 (Drumheller)	15	38,700	1:2,580
6 (Calgary excluding CMA)	20	38,058	1:1,903
7 (Stettler)	16	40,900	1:2,556
8 (Red Deer)	54	119,200	1:2,207
9 (Rocky Mountain House)	3	16,300	1:5,433
10 (Camrose)	32	79,100	1:2,472
11 (Edmonton excluding CMA)	9	30,227	1:3,359
12 (Bonnyville)	14	45,800	1:3,271
13 (Whitecourt)	18	55,300	1:3,072
14 (Hinton)	5	24,800	1:4,960
15 (Banff)	10	22,900	1:2,290
16 (Fort McMurray)	16	48,700	1:3,044
17 (High Level)	13	50,600	1:3,892
18 (Grande Cache)	6	12,500	1:2,083
19 (Grande Prairie)	33	72,100	1:2,185
Census Metropolitan Area (CMA) of Calgary	376	693,142[3]	1:1,843
Census Metropolitan Area (CMA) of Edmonton	499	785,673[3]	1:1,574
Location Unknown	38	—	—
PROVINCIAL TOTAL	**1,263**	**2,395,000**	**1:1,896**

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[1] Source: Alberta Association of Medical Radiation Technologists. Number of medical radiation technologists registered with the Association and residing in Alberta as of December 31, 1988.

[2] Source: "(Preliminary) Population Estimates by Census Division, Alberta, 1988," Alberta Bureau of Statistics, June 1989.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

TABLE 1B
COMMUNITY BREAKDOWN OF REGISTERED MEDICAL RADIATION TECHNOLOGISTS, ALBERTA, 1988

Community by Population Size	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	376	693,142[3]	1:1,843
Census Metropolitan Area (CMA) of Edmonton	499	785,673[3]	1:1,574
10,000 to 69,999			
Camrose	7	12,968	1:1,853
Fort McMurray	12	34,949	1:2,912
Grande Prairie	17	26,648	1:1,568
Lethbridge	43	60,610	1:1,410
Lloydminster	3	10,201	1:3,400
Medicine Hat	13	42,290	1:3,253
Red Deer	41	54,839	1:1,338
Wetaskiwin	8	10,103	1:1,263
5,000 to 9,999			
Bonnyville	2	5,575	1:2,788
Brooks	6	9,464	1:1,577
Crowsnest Pass	3	6,912	1:2,304
Drumheller	5	6,366	1:1,273
Edson	2	7,323	1:3,662
High River	7	5,096	1:728
Hinton	3	8,846	1:2,949
Innisfail	3	5,535	1:1,845
Lacombe	3	6,110	1:2,037
Okotoks	3	5,666	1:1,889
Olds	6	5,004	1:834
Peace River	5	6,355	1:1,271
Ponoka	3	5,473	1:1,824
Rocky Mountain House	1	5,261	1:5,261
Slave Lake	2	5,611	1:2,806
St. Paul	4	5,128	1:1,282
Stettler	5	5,147	1:1,029
Taber	2	6,382	1:3,191
Vegreville	4	5,276	1:1,319
Whitecourt	3	6,126	1:2,042
Under 5,000	134	540,921	1:4,037
Location Unknown	38	—	—
PROVINCIAL TOTAL	**1,263**	**2,395,000[4]**	**1:1,896**

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[1] Source: Alberta Association of Medical Radiation Technologists. Number of medical radiation technologists registered with the Association and residing in Alberta as of December 31, 1988.

[2] Source: "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[4] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

TABLE 2
SELECTED MANPOWER STATISTICS FOR MEDICAL RADIATION TECHNOLOGISTS IN ALBERTA, 1986, 1987, AND 1988

	1986	1987	1988
Number of Registered Personnel	1,089[1]	1,074[1]	1,263[2]
% Change in Number of Registered Personnel	N/A	−1.4%	N/A
Population (Alberta)[3]	2,375,100	2,377,700	2,395,000
% Change in Population	1.1%	0.1%	0.7%
Personnel-to-Population Ratios:			
– Alberta	1:2,181	1:2,214	1:1,896

IV. Educational Programs

Medical radiation technologists are trained in one of three areas: radiography (medical x-ray technology), radiation therapy (oncology), and nuclear medical technology.

Radiography: Seven training hospitals in Calgary, Edmonton and Red Deer, in conjunction with the Northern Alberta Institute of Technology, offer a two-year medical x-ray technology diploma program. There were 47 graduates in 1987-88.

Radiation Therapy: A 27-month program is offered at the Cross Cancer Institute in Edmonton and the Tom Baker Cancer Centre in Calgary. These programs produced 10 graduates in 1987-88.

Nuclear Medical Technology: A two-year program is offered by the Southern Alberta Institute of Technology in conjunction with the University of Alberta Hospitals in Edmonton and the Foothills Hospital in Calgary. The program produced 10 graduates in 1987-88.

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[1] Source: Medical Radiation Technologists Committee, Alberta Health Disciplines Board. Number of medical radiation technologists registered with the Committee and residing in Alberta as of December 31 of the indicated year.

[2] Source: Alberta Association of Medical Radiation Technologists. Number of medical radiation technologists registered with the Association and residing in Alberta as of December 31, 1988.

[3] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

TABLE 3
EDUCATIONAL PROGRAMS FOR MEDICAL RADIATION TECHNOLOGISTS IN ALBERTA[1]

	1985-86	1986-87	1987-88
A. MEDICAL X-RAY TECHNOLOGY DIPLOMA			
Northern Alberta Institute of Technology (Program Length: 2 years)			
Enrolments:			
1st Year	48	48	48
2nd Year	59	48	45
Graduates:	54	57	47
B. RADIATION ONCOLOGY TECHNOLOGY DIPLOMA			
Cross Cancer Institute (Program Length: 27 months)			
Enrolments:			
1st Year	5	6	6
2nd Year	3	4	2
Graduates:	1	3	3
Tom Baker Cancer Centre (Program Length: 27 months)			
Enrolments:			
1st Year	3	4	4
2nd Year	—	2	5
Graduates:	4	—	7
PROVINCIAL TOTAL			
Number of Programs in Radiation Oncology: 2			
Graduates:	5	3	10
C. NUCLEAR MEDICAL TECHNOLOGY DIPLOMA			
Southern Alberta Institute of Technology (Program Length: 2 years)			
Enrolments:			
1st Year	16	16	16
2nd Year	11	14	11
Graduates:	10	14	10

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[1] Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1988.

Occupational Hygiene Technologists

I. Overview

Definition: Under the supervision of occupational hygienists, study, evaluate and conduct health programs to control those environmental factors or stresses arising in a work situation which may cause sickness, injury or significant discomfort and inefficiency among workers. Collect, measure and analyze samples of dust, gases, vapors and other potentially toxic materials to determine adherence to prescribed standards. Investigate adequacy of ventilation, exhaust equipment, lighting and other conditions which may affect employee health. Perform sound-level evaluations to determine relationship of noise to employee discomfort and efficiency. Collaborate with other scientists and engineers to institute control and correction of hazards. Participate in education meetings to instruct employees in matters pertaining to occupational health.

(Source: Department of Health, Government of Alberta)

Since registration with the Alberta section of the American Industrial Hygiene Association is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1988 by the Alberta Health and Social Services Disciplines Committee, was used as the source of manpower information.

There were 113 occupational hygiene technologists practising in Alberta in 1988.[1] Occupational hygiene technologists employed in the Census Metropolitan Areas of Calgary and Edmonton accounted for 74 percent of the total. The provincial occupational hygiene technologist-to- population ratio was 1:21,195 in 1988.

II. Professional Association and Legislation Information

a) Licensing, Registration or Certification Authority:

None.

b) Professional Association:

American Industrial Hygiene Association (Alberta Section)
P.O. Box 1803, Station "M"
Calgary, Alberta
T2P 2L8

President: Mr. Dan Wurster

c) Legislation:

There is no legislation regulating occupational hygiene technologists in Alberta at present.

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1988," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF PRACTISING OCCUPATIONAL HYGIENE TECHNOLOGISTS, ALBERTA, 1988

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	7	57,400	1:8,200
2 (Lethbridge)	3	115,800	1:38,600
3 (Pincher Creek)	0	35,400	—
4 (Hanna)	0	12,300	—
5 (Drumheller)	0	38,700	—
6 (Calgary excluding CMA)	0	38,058	—
7 (Stettler)	0	40,900	—
8 (Red Deer)	6	119,200	1:19,867
9 (Rocky Mountain House)	0	16,300	—
10 (Camrose)	1	79,100	1:79,100
11 (Edmonton excluding CMA)	0	30,227	—
12 (Bonnyville)	0	45,800	—
13 (Whitecourt)	0	55,300	—
14 (Hinton)	3	24,800	1:8,267
15 (Banff)	0	22,900	—
16 (Fort McMurray)	5	48,700	1:9,740
17 (High Level)	0	50,600	—
18 (Grande Cache)	0	12,500	—
19 (Grande Prairie)	4	72,100	1:18,025
Census Metropolitan Area (CMA) of Calgary	41	693,142[3]	1:16,906
Census Metropolitan Area (CMA) of Edmonton	43	785,673[3]	1:18,271
PROVINCIAL TOTAL	**113**	**2,395,000**	**1:21,195**

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1988," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "(Preliminary) Population Estimates by Census Division, Alberta, 1988," Alberta Bureau of Statistics, June 1989.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

TABLE 1B
COMMUNITY BREAKDOWN OF PRACTISING OCCUPATIONAL HYGIENE TECHNOLOGISTS, ALBERTA, 1988

Community by Population Size	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	41	693,142[3]	1:16,906
Census Metropolitan Area (CMA) of Edmonton	43	785,673[3]	1:18,271
10,000 to 69,999			
Camrose	0	12,968	—
Fort McMurray	5	34,949	1:6,990
Grande Prairie	3	26,648	1:8,883
Lethbridge	3	60,610	1:20,203
Lloydminster	0	10,201	—
Medicine Hat	4	42,290	1:10,573
Red Deer	4	54,839	1:13,710
Wetaskiwin	0	10,103	—
5,000 to 9,999			
Bonnyville	0	5,575	—
Brooks	0	9,464	—
Crowsnest Pass	0	6,912	—
Drumheller	0	6,366	—
Edson	1	7,323	1:7,323
High River	0	5,096	—
Hinton	2	8,846	1:4,423
Innisfail	0	5,535	—
Lacombe	0	6,110	—
Okotoks	0	5,666	—
Olds	0	5,004	—
Peace River	1	6,355	1:6,355
Ponoka	2	5,473	1:2,737
Rocky Mountain House	0	5,261	—
Slave Lake	0	5,611	—
St. Paul	0	5,128	—
Stettler	0	5,147	—
Taber	0	6,382	—
Vegreville	0	5,276	—
Whitecourt	0	6,126	—
Under 5,000	4	540,921	1:135,230
PROVINCIAL TOTAL	**113**	**2,395,000[4]**	**1:21,195**

---

[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1988," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[4] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

TABLE 2
SELECTED MANPOWER STATISTICS FOR OCCUPATIONAL HYGIENE TECHNOLOGISTS IN ALBERTA, 1986, 1987, AND 1988

	1986	1987	1988
Number of Practising Personnel[1]	92	113	113
% Change in Number of Practising Personnel	4.5%	22.8%	0.0%
Population (Alberta)[2]	2,375,100	2,377,700	2,395,000
% Change in Population	1.1%	0.1%	0.7%
Personnel-to-Population Ratios:			
– Alberta	1:25,816	1:21,042	1:21,195

IV. Educational Programs

Mount Royal College offers a diploma program in occupational hygiene technology. The program produced four graduates in 1987-88.

TABLE 3
EDUCATIONAL PROGRAM FOR OCCUPATIONAL HYGIENE TECHNOLOGISTS IN ALBERTA[3]

	1985-86	1986-87	1987-88
OCCUPATIONAL HYGIENE DIPLOMA			
Mount Royal College			
(Program Length: 2 years)			
Enrolments:			
1st year	11	14	22
2nd year	11	7	6
Graduates:	5	3	4

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[1] Sources: "Health and Social Service Personnel Working in Alberta, March 31," 1986, 1987 and 1988 editions, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

[3] Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1988.

Occupational Therapists

I. Overview

Definition: Plan and carry out treatment programs based on activities such as work, education and recreation to rehabilitate physically and mentally disabled persons. Administer tests and observe patients to assess their emotional, mental and physical capacities. Plan and direct programs in manual and creative arts, industrial and vocational skills, recreational activities, remedial games, cultural and educational interests and play activities for children. Conduct group programs to assist patients in building self-confidence and in adjusting to family and community. Train handicapped patients in self-care and daily living activities. Advise and instruct patients on specially adapted household equipment and furnishings. Assess patient's vocational potential and provide work adjustment and actual work experience. Participate in testing and training of patients with perceptual motor problems and provide training for children with learning disabilities. Record patient's activities, response and progress. Attend meetings of rehabilitation team and seminars, workshops and courses on occupational therapy. Supervise and instruct occupational therapy students and auxiliary personnel assigned to department.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

Registration with the Alberta Association of Registered Occupational Therapists will become mandatory in 1989 when the Occupational Therapy Profession Act is proclaimed. The Association reported there were 425 active occupational therapists registered and residing in Alberta as of January 31, 1989.[1]

According to a survey of health and social service personnel working in Alberta, 46 percent of occupational therapists were employed in acute care hospitals, 19 percent in auxiliary hospitals, 7 percent in health units, 8 percent in nursing homes and 6 percent by school boards and in schools for the handicapped.[2] Occupational therapists employed in the Census Metropolitan Areas of Calgary and Edmonton accounted for 81 percent of the total registered with the Association. The provincial occupational therapist-to-population ratio was 1:5,635 in 1988.

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[1] Source: Alberta Association of Registered Occupational Therapists. Number of occupational therapists registered with the Association and residing in Alberta as of January 31, 1989. Excludes honorary and student members.

[2] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1988," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

II. Professional Association and Legislation Information

a) Licensing, Registration or Certification Authority:

None.

b) Professional Association:

Alberta Association of Registered Occupational Therapists
300, 5241 – Calgary Trail Southbound N.W.
Edmonton, Alberta
T6H 5G8

Registrar: Ms. Betty Lou Smathers

President: Ms. Heather Chilton

c) Legislation:

The Occupational Therapy Profession Act received royal assent at the 1987 spring session of the Alberta Legislature. Regulations are expected to be approved in the Spring of 1989. The legislation sets out the educational requirements for registration, provides a mechanism for the review of complaints, and reserves the title "occupational therapist" for registered members.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF REGISTERED OCCUPATIONAL THERAPISTS, ALBERTA, 1988

Census Division (Major Urban Centre)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	8	57,400	1:7,175
2 (Lethbridge)	6	115,800	1:19,300
3 (Pincher Creek)	2	35,400	1:17,700
4 (Hanna)	1	12,300	1:12,300
5 (Drumheller)	1	38,700	1:38,700
6 (Calgary excluding CMA)	4	38,058	1:9,515
7 (Stettler)	3	40,900	1:13,633
8 (Red Deer)	17	119,200	1:7,012
9 (Rocky Mountain House)	0	16,300	—
10 (Camrose)	4	79,100	1:19,775
11 (Edmonton excluding CMA)	5	30,227	1:6,045
12 (Bonnyville)	4	45,800	1:11,450
13 (Whitecourt)	3	55,300	1:18,433
14 (Hinton)	0	24,800	—
15 (Banff)	2	22,900	1:11,450
16 (Fort McMurray)	3	48,700	1:16,233
17 (High Level)	1	50,600	1:50,600
18 (Grande Cache)	0	12,500	—
19 (Grande Prairie)	12	72,100	1:6,008
Census Metropolitan Area (CMA) of Calgary	125	693,142[3]	1:5,545
Census Metropolitan Area (CMA) of Edmonton	218	785,673[3]	1:3,604
Location Unknown	6	—	—
PROVINCIAL TOTAL	**425**	**2,395,000**	**1:5,635**

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[1] Source: Alberta Association of Registered Occupational Therapists. Number of occupational therapists registered with the Association and residing in Alberta as of January 31, 1989. Excludes honorary and student members.

[2] Source: "(Preliminary) Population Estimates by Census Division, Alberta, 1988," Alberta Bureau of Statistics, June 1989.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

TABLE 1B
COMMUNITY BREAKDOWN OF REGISTERED OCCUPATIONAL THERAPISTS, ALBERTA, 1988

Community by Population Size	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	125	693,142[3]	1:5,545
Census Metropolitan Area (CMA) of Edmonton	218	785,673[3]	1:3,604
10,000 to 69,999			
Camrose	0	12,968	—
Fort McMurray	3	34,949	1:11,650
Grande Prairie	10	26,648	1:2,665
Lethbridge	5	60,610	1:12,122
Lloydminster	2	10,201	1:5,101
Medicine Hat	7	42,290	1:6,041
Red Deer	12	54,839	1:4,570
Wetaskiwin	2	10,103	1:5,052
5,000 to 9,999			
Bonnyville	1	5,575	1:5,575
Brooks	0	9,464	—
Crowsnest Pass	0	6,912	—
Drumheller	0	6,366	—
Edson	0	7,323	—
High River	2	5,096	1:2,548
Hinton	0	8,846	—
Innisfail	0	5,535	—
Lacombe	3	6,110	1:2,037
Okotoks	1	5,666	1:5,666
Olds	0	5,004	—
Peace River	0	6,355	—
Ponoka	1	5,473	1:5,473
Rocky Mountain House	0	5,261	—
Slave Lake	1	5,611	1:5,611
St. Paul	1	5,128	1:5,128
Stettler	2	5,147	1:2,574
Taber	0	6,382	—
Vegreville	0	5,276	—
Whitecourt	0	6,126	—
Under 5,000	23	540,921	1:23,518
Location Unknown	6	—	—
PROVINCIAL TOTAL	**425**	**2,395,000[4]**	**1:5,635**

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[1] Source: Alberta Association of Registered Occupational Therapists. Number of occupational therapists registered with the Association and residing in Alberta as of January 31, 1989. Excludes honorary and student members.

[2] Source: "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[4] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

TABLE 2
SELECTED MANPOWER STATISTICS FOR OCCUPATIONAL THERAPISTS IN ALBERTA, 1986, 1987, AND 1988

	1986	1987	1988
Number of Practising or Registered Personnel	330[1]	348[1]	425[2]
% Change in Number of Practising Personnel	11.5%	5.5%	N/A
Population (Alberta)[3]	2,375,100	2,377,700	2,395,000
% Change in Population	1.1%	0.1%	0.7%
Personnel-to-Population Ratios:			
– Alberta	1:7,197	1:6,832	1:5,635

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[1] Sources: "Health and Social Service Personnel Working in Alberta, March 31," 1986 and 1987 editions, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: Alberta Association of Registered Occupational Therapists. Number of occupational therapists registered with the Association and residing in Alberta as of January 31, 1989. Excludes honorary and student members.

[3] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

IV. Educational Programs

A four-year bachelor of science program in occupational therapy is offered at the University of Alberta. Students in this program may be enrolled in the basic or an accelerated route in which entry is made in the third year and studies are completed in 24 continuous months. The program produced 76 graduates in 1987-88. Under an interprovincial training agreement, five training places per year are reserved for Saskatchewan students in this program.

In addition, a two-year master of science program in occupational therapy commenced at the University of Alberta in 1986-87.

TABLE 3
EDUCATIONAL PROGRAMS FOR OCCUPATIONAL THERAPISTS IN ALBERTA[1]

	1985-86	1986-87	1987-88
A. BACCALAUREATE PROGRAM			
University of Alberta			
(Program Length: 4 years)			
Enrolments:			
1st Year	Pre	Professional	Year
2nd Year	40	42	40
3rd Year	40	75	79
4th Year	53	54	80
Graduates:	48	47	76
B. MASTER'S PROGRAM			
University of Alberta			
(Program Length: 2 years)			
Enrolments:	—	3	7
Graduates:	—	—	—

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[1] Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1988.

Opththalmic Dispensers

I. Overview

Definition: An ophthalmic dispenser supplies, prepares, or dispenses ophthalmic appliances; interprets prescriptions from ophthalmologists or optometrists in respect of ophthalmic appliances; fits, adjusts and adapts ophthalmic appliances to the needs of the intended wearer in accordance with a prescription from an ophthalmologist or optometrist, or without a prescription where lenses are duplicated with no change in their refractive value.

(Source: The Ophthalmic Dispensers Act, RSA 1980)

There were 386 ophthalmic dispensers who resided in Alberta and registered with the Alberta Guild of Ophthalmic Dispensers in 1988.[1] Ophthalmic dispensers located in the Census Metropolitan Areas of Calgary and Edmonton accounted for 80 percent of the total. The number of ophthalmic dispensers registered in Alberta grew by 14 percent between 1986 and 1988, while the provincial population increased by 0.8 percent during the same period. The provincial ophthalmic dispenser-to-population ratio was 1:6.205 in 1988.

Most of the services provided by ophthalmic dispensers are also provided by optometrists (see chapter on Optometrists).

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[1] Source: Alberta Guild of Ophthalmic Dispensers. Number of ophthalmic dispensers registered with the Alberta Guild of Ophthalmic Dispensers and residing in Alberta as of December 1, 1988.

II. Professional Association and Legislation Information

a) Certification Authority:

Ophthalmic Dispensers Examining Board
c/o Professions and Occupations Bureau
5th Floor, Kensington Place
10011 – 109 Street
Edmonton, Alberta
T5J 3S8

Chairman: Dr. Henry Wyatt

b) Professional Association:

Alberta Guild of Ophthalmic Dispensers
1140, 10830 Jasper Avenue
Edmonton, Alberta
T5J 2B3

Registrar: Ms. Judy Klassen

President: Mr. R. D. Jeffries

c) Legislation:

Under the authority of the Ophthalmic Dispensers Act, all individuals who wish to practise as ophthalmic dispensers must apply for and receive a certificate of competency from the Ophthalmic Dispensers Examining Board, a provincial government certification body. The Board sets the educational qualifications and examinations required for obtaining a certificate of competency, or a special certificate of competency to dispense contact lenses. The titles "ophthalmic dispenser," "registered ophthalmic dispenser" and "optical dispenser" are reserved for registered members.

Successful applicants must register with the Alberta Guild of Ophthalmic Dispensers, the professional association. The Alberta Guild of Ophthalmic Dispensers is responsible for regulating the conduct of its members and for maintaining professional discipline.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF REGISTERED OPHTHALMIC DISPENSERS, ALBERTA, 1988

Census Division (Major Urban Centre)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	11	57,400	1:5,218
2 (Lethbridge)	18	115,800	1:6,433
3 (Pincher Creek)	0	35,400	—
4 (Hanna)	0	12,300	—
5 (Drumheller)	1	38,700	1:38,700
6 (Calgary excluding CMA)	1	38,058	1:38,058
7 (Stettler)	3	40,900	1:13,633
8 (Red Deer)	15	119,200	1:7,947
9 (Rocky Mountain House)	0	16,300	—
10 (Camrose)	5	79,100	1:15,820
11 (Edmonton excluding CMA)	1	30,227	1:30,227
12 (Bonnyville)	2	45,800	1:22,900
13 (Whitecourt)	1	55,300	1:55,300
14 (Hinton)	1	24,800	1:24,800
15 (Banff)	0	22,900	—
16 (Fort McMurray)	4	48,700	1:12,175
17 (High Level)	1	50,600	1:50,600
18 (Grande Cache)	0	12,500	—
19 (Grande Prairie)	7	72,100	1:10,300
Census Metropolitan Area (CMA) of Calgary	125	693,142[3]	1:5,545
Census Metropolitan Area (CMA) of Edmonton	184	785,673[3]	1:4,270
Location Unknown	6	—	—
PROVINCIAL TOTAL	**386**	**2,395,000**	**1:6,205**

---

[1] Source: Alberta Guild of Ophthalmic Dispensers. Number of ophthalmic dispensers registered with the Alberta Guild of Ophthalmic Dispensers and residing in Alberta as of December 1, 1988.

[2] Source: "(Preliminary) Population Estimates by Census Division, Alberta, 1988," Alberta Bureau of Statistics, June 1989.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

TABLE 1B
COMMUNITY BREAKDOWN OF REGISTERED OPHTHALMIC DISPENSERS, ALBERTA, 1988

Community by Population Size	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	125	693,142[3]	1:5,545
Census Metropolitan Area (CMA) of Edmonton	184	785,673[3]	1:4,270
10,000 to 69,999			
Camrose	2	12,968	1:6,484
Fort McMurray	4	34,949	1:8,737
Grande Prairie	5	26,648	1:5,330
Lethbridge	17	60,610	1:3,565
Lloydminster	1	10,201	1:10,201
Medicine Hat	11	42,290	1:3,845
Red Deer	15	54,839	1:3,656
Wetaskiwin	0	10,103	—
5,000 to 9,999			
Bonnyville	1	5,575	1:5,575
Brooks	1	9,464	1:9,464
Crowsnest Pass	0	6,912	—
Drumheller	1	6,366	1:6,366
Edson	1	7,323	1:7,323
High River	0	5,096	—
Hinton	0	8,846	—
Innisfail	0	5,535	—
Lacombe	0	6,110	—
Okotoks	1	5,666	1:5,666
Olds	0	5,004	—
Peace River	2	6,355	1:3,178
Ponoka	0	5,473	—
Rocky Mountain House	0	5,261	—
Slave Lake	0	5,611	—
St. Paul	1	5,128	1:5,128
Stettler	2	5,147	1:2,574
Taber	0	6,382	—
Vegreville	0	5,276	—
Whitecourt	0	6,126	—
Under 5,000	6	540,921	1:90,154
Location Unknown	6	—	—
PROVINCIAL TOTAL	**386**	**2,395,000[4]**	**1:6,205**

---

[1] Source: Alberta Guild of Ophthalmic Dispensers. Number of ophthalmic dispensers registered with the Alberta Guild of Ophthalmic Dispensers and residing in Alberta as of December 1, 1988.

[2] Source: "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[4] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

TABLE 2
SELECTED MANPOWER STATISTICS FOR OPHTHALMIC DISPENSERS IN ALBERTA, 1986, 1987, AND 1988

	1986	1987	1988
Number of Registered Personnel[1]	340	359	386
% Change in Number of Registered Personnel	5.9%	5.6%	7.5%
Population (Alberta)[2]	2,375,100	2,377,700	2,395,000
% Change in Population	1.1%	0.1%	0.7%
Personnel-to-Population Ratios:			
– Alberta	1:6,986	1:6,623	1:6,205

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[1] Source: Alberta Guild of Ophthalmic Dispensers. Number of ophthalmic dispensers registered with the Alberta Guild of Ophthalmic Dispensers and residing in Alberta as of December 1 of the indicated year.

[2] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

IV. Educational Programs

Since 1986, the Northern Alberta Institute of Technology has offered programs for two levels of ophthalmic dispensing: eyeglasses and contact lenses. Individuals enrolled in the courses must serve a two-year apprenticeship in an optical laboratory or dispensary concurrent with their studies. Each course is two years in length and consists of independent study plus lectures in Edmonton and Calgary. The course in eyeglasses is a pre-requisite for the one in contact lenses. Following these courses, individuals must write the examination of the Ophthalmic Dispensers Examining Board. In May 1988, there were 54 graduates from the course in eyeglasses and one from the course in contact lenses.

TABLE 3
EDUCATIONAL PROGRAMS FOR
OPHTHALMIC DISPENSERS IN ALBERTA[1]

	1985-86	1986-87	1987-88
Northern Alberta Institute of Technology Eyeglass Dispensing (Program Length: 2 years) Independent Study			
Enrolments:			
1st Year	—	86	78
2nd Year	—	42	66
Graduates:	—	38	54
Northern Alberta Institute of Technology Contact Lens Dispensing (Program Length: 2 years) Independent Study			
Enrolments:			
1st Year	—	4	9
2nd Year	—	5	1
Graduates:	—	5	1
PROVINCIAL TOTAL			
Number of Training Programs: 2			
Graduates:	—	43	55

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[1] Source: Northern Alberta Institute of Technology.

Optometrists

I. Overview

Definition: A person engaged in the practice of optometry.

"Practice of optometry" means:

(i) the examination of the human eye, its related structures and the human vision system in order to measure, assess, diagnose or refer for consultation or treatment any condition of the human eye, its related structures and the human vision system;

(ii) the treatment of conditions of the human eye, its related structures and the human vision system, through the prescribing and dispensing of ophthalmic appliances or other aids, the prescribing and provision of orthoptics or perceptual training and the offering of advice, consultation or counselling.

(Source: Optometry Profession Act, S.A. 1983, Ch. 0-16)

There were 215 optometrists who resided in Alberta and registered with the Alberta Association of Optometrists (AAO) in 1988.[1] Optometrists located in the Census Metropolitan Areas of Calgary and Edmonton accounted for 62 percent of the total. Some optometrists in the larger urban centres operate satellite offices in neighboring rural areas and smaller centres throughout the province. Some of the services provided by optometrists, such as the dispensing of ophthalmic appliances, can also be provided by ophthalmic dispensers (see chapter on Ophthalmic Dispensers). The provincial optometrist-to-population ratio was 1:11,140 in 1988.

II. Professional Association and Legislation Information

a) Professional Association/Registration Authority:

Alberta Association of Optometrists
#1, The Professional Centre
9333 – 50 Street
Edmonton, Alberta
T6B 2L5

Executive Director: Mr. R. Glenn Campbell

President: Dr. Graham W. Dawdy

President Elect: Dr. Gerald R. Mezei

b) Legislation:

Under the authority of the Optometry Profession Act, all individuals who wish to practise as optometrists and use this title must apply for registration with the Alberta Association of Optometrists (AAO). The academic qualifications required for registration are set out in regulation. The Universities Coordinating Council evaluates educational qualifications and prescribes examinations for registration.

Besides registration, the AAO is also responsible for discipline and practice review.

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[1] Source: Alberta Association of Optometrists. Number of optometrists registered with the AAO and residing in Alberta as of December 31, 1988. Excludes honorary, inactive and retired members.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF REGISTERED OPTOMETRISTS, ALBERTA, 1988

Census Division (Major Urban Centre)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	5	57,400	1:11,480
2 (Lethbridge)	16	115,800	1:7,238
3 (Pincher Creek)	1	35,400	1:35,400
4 (Hanna)	1	12,300	1:12,300
5 (Drumheller)	0	38,700	—
6 (Calgary excluding CMA)	3	38,058	1:12,686
7 (Stettler)	3	40,900	1:13,633
8 (Red Deer)	19	119,200	1:6,274
9 (Rocky Mountain House)	0	16,300	—
10 (Camrose)	6	79,100	1:13,183
11 (Edmonton excluding CMA)	3	30,227	1:10,076
12 (Bonnyville)	3	45,800	1:15,267
13 (Whitecourt)	5	55,300	1:11,060
14 (Hinton)	1	24,800	1:24,800
15 (Banff)	3	22,900	1:7,633
16 (Fort McMurray)	2	48,700	1:24,350
17 (High Level)	2	50,600	1:25,300
18 (Grande Cache)	1	12,500	1:12,500
19 (Grande Prairie)	7	72,100	1:10,300
Census Metropolitan Area (CMA) of Calgary	65	693,142[3]	1:10,664
Census Metropolitan Area (CMA) of Edmonton	69	785,673[3]	1:11,387
PROVINCIAL TOTAL	**215**	**2,395,000**	**1:11,140**

---

[1] Source: Alberta Association of Optometrists. Number of optometrists registered with the AAO and residing in Alberta as of December 31, 1988. Excludes honorary, inactive and retired members.

[2] Source: "(Preliminary) Population Estimates by Census Division, Alberta, 1988," Alberta Bureau of Statistics, June 1989.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

TABLE 1B
COMMUNITY BREAKDOWN OF REGISTERED OPTOMETRISTS, ALBERTA, 1988

Community by Population Size	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	65	693,142[3]	1:10,664
Census Metropolitan Area (CMA) of Edmonton	69	785,673[3]	1:11,387
10,000 to 69,999			
Camrose	2	12,968	1:6,484
Fort McMurray	2	34,949	1:17,475
Grande Prairie	6	26,648	1:4,441
Lethbridge	14	60,610	1:4,329
Lloydminster	3	10,201	1:3,400
Medicine Hat	5	42,290	1:8,458
Red Deer	14	54,839	1:3,917
Wetaskiwin	3	10,103	1:3,368
5,000 to 9,999			
Bonnyville	0	5,575	—
Brooks	0	9,464	—
Crowsnest Pass	2	6,912	1:3,456
Drumheller	0	6,366	—
Edson	0	7,323	—
High River	2	5,096	1:2,548
Hinton	1	8,846	1:8,846
Innisfail	0	5,535	—
Lacombe	2	6,110	1:3,055
Okotoks	0	5,666	—
Olds	1	5,004	1:5,004
Peace River	1	6,355	1:6,355
Ponoka	3	5,473	1:1,824
Rocky Mountain House	0	5,261	—
Slave Lake	1	5,611	1:5,611
St. Paul	1	5,128	1:5,128
Stettler	1	5,147	1:5,147
Taber	2	6,382	1:3,191
Vegreville	1	5,276	1:5,276
Whitecourt	2	6,126	1:3,063
Under 5,000	12	540,921	1:45,077
PROVINCIAL TOTAL	**215**	**2,395,000[4]**	**1:11,140**

---

[1] Source: Alberta Association of Optometrists. Number of optometrists registered with the AAO and residing in Alberta as of December 31, 1988. Excludes honorary, inactive and retired members.

[2] Source: "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[4] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

TABLE 2
SELECTED MANPOWER STATISTICS FOR OPTOMETRISTS IN ALBERTA, 1986, 1987, AND 1988

	1986	1987	1988
Number of Registered Personnel[1]	211	212	215
% Change in Number of Registered Personnel	0.5%	0.5%	1.4%
Population (Alberta)[2]	2,375,100	2,377,700	2,395,000
% Change in Population	1.1%	0.1%	0.7%
Personnel-to-Population Ratios:			
– Alberta	1:11,256	1:11,216	1:11,140
– Western Canada[3]	1:12,301	—	—

IV. Educational Programs

There is no training program for optometrists in Alberta. However, Alberta, Saskatchewan, and Manitoba have had an inter-provincial training agreement with the School of Optometry at the University of Waterloo and the Government of Ontario since 1976. Under this agreement, the three western provinces annually purchase 13 training places (seven places for Alberta; three places for Saskatchewan; and three places for Manitoba) in the four-year program.

In August 1986, the agreement with the University of Waterloo and the Government of Ontario was renewed for a further five-year period. Pre-requisite for admission into the School of Optometry is two years of pre-optometry training (or equivalent courses in the sciences, including physics, mathematics, biology, zoology, chemistry, and psychology). In 1988, Alberta had a total of 26 students enrolled in the four-year training program at the University of Waterloo under the current agreement. Ten students graduated in 1987-88.

In addition to the University of Waterloo, a program in optometry is offered in French at the University of Montreal. The Western provinces have no inter-provincial training agreements with the University of Montreal.

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[1] Source: Alberta Association of Optometrists. Number of optometrists registered with the AAO and residing in Alberta as of December 31 of the indicated year. Excludes honorary, inactive, and retired members.

[2] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

[3] Source: Ratio for the provinces of Manitoba, Saskatchewan, Alberta and British Columbia combined derived from, **Health Personnel in Canada — 1987**. Ottawa, Ontario: Department of National Health and Welfare, December 1988.

Pharmacists

I. Overview

Definition: Compound and dispense prescribed pharmaceuticals and related preparations. Prepare or supervise preparation of liquid medicines, ointments, powders, pills and other medications. Check prescriptions for overdoses and drug interactions. Weigh, measure and mix drugs and other medicinal compounds and fill bottles and capsules with correct quantity and composition of preparation. Store and preserve biologicals, vaccines, serums and other drugs to prevent deterioration. Dispense medical and surgical products for internal and external use as prescribed. Maintain patient medication profiles and record prescriptions dispensed and poisons and narcotics issued. Order and maintain stock of pharmaceutical supplies. Provide information on uses and effects of medicaments. Sell non-prescription drugs, sick-room supplies, toiletries, cosmetics, lotions and other commercial products.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

There were 2,078 pharmacists who resided in Alberta and registered with the Alberta Pharmaceutical Association (APA) in 1988.[1] According to a survey of health and social service personnel working in Alberta, 84 percent of pharmacists practised in community pharmacies while most of the remaining 16 percent were employed in hospital settings.[2] Pharmacists located in the Census Metropolitan Areas of Calgary and Edmonton accounted for 66 percent of the total. The number of pharmacists registered in Alberta grew by 8.6 percent between 1986 and 1988 while the provincial population increased by 0.8 percent during the same period. The provincial pharmacist-to-population ratio was 1:1,153 in 1988.

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[1] Source: Alberta Pharmaceutical Association. Number of pharmacists registered with the APA and residing in Alberta as of December 31, 1988. Excludes inactive and retired members.

[2] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1988," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

II. Professional Association and Legislation Information

a) Professional Association/Licensing Body:

Alberta Pharmaceutical Association
10615 – 124 Street
Edmonton, Alberta
T5N 1S5

Registrar-Treasurer: Mr. Larry J. Shipka

President: Ms. Margo E. Ward

President Elect: Mr. Greg E. Eberhart

b) Legislation:

Under the authority of the Pharmaceutical Association Act, all individuals who wish to practise as pharmacists must register with the Alberta Pharmaceutical Association (APA).

The APA is also responsible for regulating the conduct of its members and for maintaining discipline. The Pharmaceutical Association Act sets the educational qualifications required for registration with the APA.

A new Pharmaceutical Profession Act was passed at the 1988 spring session of the legislature. This Act will be proclaimed when new regulations are approved, probably in 1989.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF REGISTERED PHARMACISTS, ALBERTA, 1988

Census Division (Major Urban Centre)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	48	57,400	1:1,196
2 (Lethbridge)	88	115,800	1:1,316
3 (Pincher Creek)	25	35,400	1:1,416
4 (Hanna)	9	12,300	1:1,367
5 (Drumheller)	29	38,700	1:1,334
6 (Calgary excluding CMA)	29	38,058	1:1,312
7 (Stettler)	27	40,900	1:1,515
8 (Red Deer)	117	119,200	1:1,019
9 (Rocky Mountain House)	6	16,300	1:2,717
10 (Camrose)	63	79,100	1:1,256
11 (Edmonton excluding CMA)	16	30,227	1:1,889
12 (Bonnyville)	36	45,800	1:1,272
13 (Whitecourt)	37	55,300	1:1,495
14 (Hinton)	16	24,800	1:1,550
15 (Banff)	25	22,900	1:916
16 (Fort McMurray)	21	48,700	1:2,319
17 (High Level)	16	50,600	1:3,163
18 (Grande Cache)	6	12,500	1:2,083
19 (Grande Prairie)	58	72,100	1:1,243
Census Metropolitan Area (CMA) of Calgary	584	693,142[3]	1:1,187
Census Metropolitan Area (CMA) of Edmonton	795	785,673[3]	1:988
Location Unknown	27	—	—
PROVINCIAL TOTAL	**2,078**	**2,395,000**	**1:1,153**

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[1] Source: Alberta Pharmaceutical Association. Number of pharmacists registered with the APA and residing in Alberta as of December 31, 1988. Excludes inactive and retired members.

[2] Source: "(Preliminary) Population Estimates by Census Division, Alberta, 1988," Alberta Bureau of Statistics, June 1989.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

TABLE 1B
COMMUNITY BREAKDOWN OF REGISTERED PHARMACISTS, ALBERTA, 1988

Community by Population Size	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	584	693,142[3]	1:1,187
Census Metropolitan Area (CMA) of Edmonton	795	785,673[3]	1:988
10,000 to 69,999			
Camrose	16	12,968	1:811
Fort McMurray	16	34,949	1:2,184
Grande Prairie	27	26,648	1:987
Lethbridge	57	60,610	1:1,063
Lloydminster	9	10,201	1:1,133
Medicine Hat	42	42,290	1:1,007
Red Deer	61	54,839	1:899
Wetaskiwin	12	10,103	1:842
5,000 to 9,999			
Bonnyville	9	5,575	1:619
Brooks	8	9,464	1:1,183
Crowsnest Pass	6	6,912	1:1,152
Drumheller	11	6,366	1:579
Edson	7	7,323	1:1,046
High River	6	5,096	1:849
Hinton	7	8,846	1:1,264
Innisfail	12	5,535	1:461
Lacombe	11	6,110	1:555
Okotoks	5	5,666	1:1,133
Olds	5	5,004	1:1,001
Peace River	9	6,355	1:706
Ponoka	15	5,473	1:365
Rocky Mountain House	6	5,261	1:877
Slave Lake	3	5,611	1:1,870
St. Paul	8	5,128	1:641
Stettler	7	5,147	1:735
Taber	7	6,382	1:912
Vegreville	8	5,276	1:660
Whitecourt	4	6,126	1:1,532
Under 5,000	278	540,921	1:1,946
Location Unknown	27	—	—
PROVINCIAL TOTAL	**2,078**	**2,395,000[4]**	**1:1,153**

---

[1] Source: Alberta Pharmaceutical Association. Number of pharmacists registered with the APA and residing in Alberta as of December 31, 1988. Excludes inactive and retired members.

[2] Source: "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[4] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

TABLE 2
SELECTED MANPOWER STATISTICS FOR PHARMACISTS IN ALBERTA, 1986, 1987, AND 1988

	1986	1987	1988
Number of Registered Personnel[1]	1,913	1,980	2,078
% Change in Number of Registered Personnel	1.7%	3.5%	4.9%
Population (Alberta)[2]	2,375,100	2,377,700	2,395,000
% Change in Population	1.1%	0.1%	0.7%
Personnel-to-Population Ratios:			
– Alberta	1:1,242	1:1,201	1:1,153

IV. Educational Programs

The University of Alberta offers a four-year baccalaureate program in pharmacy. The program produced 101 graduates in 1987-88.

TABLE 3
EDUCATIONAL PROGRAM FOR PHARMACISTS IN ALBERTA[3]

	1985-86	1986-87	1987-88
BACCALAUREATE PROGRAM			
University of Alberta			
(Program Length: 4 years)			
Enrolments:			
1st Year	102	88	89
2nd Year	117	129	111
3rd Year	91	114	126
4th Year	67	77	106
Graduates:	66	77	101

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[1] Source: Alberta Pharmaceutical Association. Number of pharmacists registered with the APA and residing in Alberta as of December 31 of the indicated year. Excludes inactive and retired members.

[2] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

[3] Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1988.

Pharmacy Assistants

I. Overview

Definition: Assist pharmacist in hospital, industrial or retail pharmacy. Compound and mix ointments, solutions, lotions or other medications, according to specific instructions, under supervision of pharmacist. Pre-package drugs. Label drugs, chemicals or other pharmaceutical preparations. Assist with keeping records of narcotics issued and returned. Count drugs issued, keep inventory and prepare orders for suppliers, as approved by the pharmacist. Unpack and store supplies and verify items received against invoices. Wash and sterilize bottles, beakers and other glassware and utensils. Clean pharmacy work area. Answer inquiries and deliver drug items, if required. Compute charges for narcotics and pharmaceuticals dispensed from pharmacy, if required.

(Source: **Canadian Classification and Dictionary of Occupations.** Ottawa, Ontario: Employment and Immigration Canada, 1980)

Since there is no professional association for pharmacy assistants, the survey of health and social service personnel working in Alberta, conducted on March 31, 1988 by the Alberta Health and Social Services Disciplines Committee, was used as the source of manpower information.

There were 562 pharmacy assistants practising in Alberta in 1988.[1] Of these, 64 percent were employed in community pharmacies and 32 percent in hospital pharmacies.[2] Pharmacy assistants employed in the Census Metropolitan Areas of Calgary and Edmonton accounted for 74 percent of the total. The provincial pharmacy assistant-to-population ratio was 1:4,262 in 1988.

II. Professional Association and Legislation Information

a) Professional Association/Registration Body:

None.

b) Legislation:

There is no legislation regulating pharmacy assistants in Alberta at present.

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1988," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Ibid.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF PRACTISING PHARMACY ASSISTANTS, ALBERTA, 1988

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	13	57,400	1:4,415
2 (Lethbridge)	22	115,800	1:5,264
3 (Pincher Creek)	5	35,400	1:7,080
4 (Hanna)	1	12,300	1:12,300
5 (Drumheller)	5	38,700	1:7,740
6 (Calgary excluding CMA)	2	38,058	1:19,029
7 (Stettler)	13	40,900	1:3,146
8 (Red Deer)	33	119,200	1:3,612
9 (Rocky Mountain House)	2	16,300	1:8,150
10 (Camrose)	10	79,100	1:7,910
11 (Edmonton excluding CMA)	3	30,227	1:10,076
12 (Bonnyville)	1	45,800	1:45,800
13 (Whitecourt)	1	55,300	1:55,300
14 (Hinton)	3	24,800	1:8,267
15 (Banff)	0	22,900	—
16 (Fort McMurray)	10	48,700	1:4,870
17 (High Level)	6	50,600	1:8,433
18 (Grande Cache)	1	12,500	1:12,500
19 (Grande Prairie)	13	72,100	1:5,546
Census Metropolitan Area (CMA) of Calgary	181	693,142[3]	1:3,830
Census Metropolitan Area (CMA) of Edmonton	237	785,673[3]	1:3,315
PROVINCIAL TOTAL	**562**	**2,395,000**	**1:4,262**

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1988," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "(Preliminary) Population Estimates by Census Division, Alberta, 1988," Alberta Bureau of Statistics, June 1989.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

TABLE 1B
COMMUNITY BREAKDOWN OF PRACTISING PHARMACY ASSISTANTS, ALBERTA, 1988

Community by Population Size	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	181	693,142[3]	1:3,830
Census Metropolitan Area (CMA) of Edmonton	237	785,673[3]	1:3,315
10,000 to 69,999			
Camrose	4	12,968	1:3,242
Fort McMurray	9	34,949	1:3,883
Grande Prairie	9	26,648	1:2,961
Lethbridge	15	60,610	1:4,041
Lloydminster	1	10,201	1:10,201
Medicine Hat	11	42,290	1:3,845
Red Deer	19	54,839	1:2,886
Wetaskiwin	2	10,103	1:5,052
5,000 to 9,999			
Bonnyville	0	5,575	—
Brooks	5	9,464	1:1,893
Crowsnest Pass	0	6,912	—
Drumheller	3	6,366	1:2,122
Edson	2	7,323	1:3,662
High River	0	5,096	—
Hinton	1	8,846	1:8,846
Innisfail	1	5,535	1:5,535
Lacombe	2	6,110	1:3,055
Okotoks	0	5,666	—
Olds	1	5,004	1:5,004
Peace River	1	6,355	1:6,355
Ponoka	6	5,473	1:912
Rocky Mountain House	2	5,261	1:2,631
Slave Lake	0	5,611	—
St. Paul	0	5,128	—
Stettler	4	5,147	1:1,287
Taber	2	6,382	1:3,191
Vegreville	1	5,276	1:5,276
Whitecourt	0	6,126	—
Under 5,000	43	540,921	1:12,580
PROVINCIAL TOTAL	**562**	**2,395,000[4]**	**1:4,262**

---

[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1988," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[4] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

TABLE 2
SELECTED MANPOWER STATISTICS FOR PHARMACY ASSISTANTS IN ALBERTA, 1986, 1987, AND 1988

	1986	1987	1988
Number of Practising Personnel[1]	394	465	562
% Change in Number of Practising Personnel	23.5%	18.0%	20.9%
Population (Alberta)[2]	2,375,100	2,377,700	2,395,000
% Change in Population	1.1%	0.1%	0.7%
Personnel-to-Population Ratios:			
– Alberta	1:6,028	1:5,113	1:4,262

IV. Educational Programs

In 1976, a ten-month program leading to a pharmacy technician certificate was established at Red Deer College. The program produced 38 graduates in 1987-88. Before the program was offered, most pharmacy assistants in Alberta were trained on the job.

TABLE 3
EDUCATIONAL PROGRAM FOR PHARMACY ASSISTANTS IN ALBERTA[3]

	1985-86	1986-87	1987-88
PHARMACY TECHNICIAN CERTIFICATE Red Deer College (Program Length: 10 months)			
Enrolments:	42	43	44
Graduates:	36	38	38

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[1] Sources: "Health and Social Service Personnel Working in Alberta, March 31," 1986, 1987 and 1988 editions, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

[3] Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1988.

Physical Therapists

I. Overview

Definition: Plan and carry out programs of physical treatment, in consultation with physicians and other health care workers, to rehabilitate injured or disabled patients. Administer muscle, nerve, joint and functional ability tests to identify physical problems of patient. Assess patient's symptoms and capabilities. Direct and aid patients individually or in groups, in activities designed to assist in muscle restoration and joint mobility. Guide patient in remedial activities involving use of parallel bars, weights, traction and other equipment. Give whirlpool and contrast baths and apply moist packs. Administer treatments using diathermy, ultrasonic and microwave machines, infra-red and ultra-violet lamps, low-voltage generators and other electrotherapeutic equipment. Instruct patients and their families in procedures to be continued at home. Record treatments given and patient's response and progress.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

There were 1,115 licensed, active physical therapists who resided in Alberta and registered with the College of Physical Therapists in 1988.[1] According to a survey conducted by the Alberta Health and Social Services Disciplines Committee, 39 percent of the practitioners were employed in acute care hospitals while 37 percent were in private practice.[2] Physical therapists located in the Census Metropolitan Areas of Calgary and Edmonton accounted for 78 percent of the total. The provincial physical therapist-to-population ratio was 1:2,148 in 1988.

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[1] Source: College of Physical Therapists of Alberta. Number of physical therapists registered with the College of Physical Therapists and residing in Alberta as of December 31, 1988. Excludes inactive members.

[2] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1988," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

II. Professional Association and Legislation Information

a) Licensing, Registration or Certification Authority:

College of Physical Therapists of Alberta
#302, 6020 – 104 Street
Edmonton, Alberta
T6H 5S4

Registrar: Ms. JoAnne Horne

President: Mr. David James

b) Professional Association:

Alberta Physiotherapy Association
P.O. Box 4627, Station C
Calgary, Alberta
T2T 5P1

President: Ms. Johanna Kwakernaak

c) Legislation:

The Physical Therapy Profession Act was proclaimed on September 30, 1985 (except Sec. 3(1)) replacing the Chartered Physiotherapists Act. The Act reserves the titles "physical therapist" or "physiotherapist" alone or in combination with other words. Employers may only hire registered members to perform physical therapy services.

The College of Physical Therapists of Alberta is responsible for registration of members, maintaining professional discipline and practice review. The Act sets out the educational requirements for registration. The Universities Coordinating Council evaluates the educational qualifications and determines equivalencies required for registration.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF REGISTERED PHYSICAL THERAPISTS, ALBERTA, 1988

Census Division (Major Urban Centre)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	16	57,400	1:3,588
2 (Lethbridge)	34	115,800	1:3,406
3 (Pincher Creek)	8	35,400	1:4,425
4 (Hanna)	3	12,300	1:4,100
5 (Drumheller)	4	38,700	1:9,675
6 (Calgary excluding CMA)	20	38,058	1:1,903
7 (Stettler)	6	40,900	1:6,817
8 (Red Deer)	51	119,200	1:2,337
9 (Rocky Mountain House)	3	16,300	1:5,433
10 (Camrose)	17	79,100	1:4,653
11 (Edmonton excluding CMA)	9	30,227	1:3,359
12 (Bonnyville)	6	45,800	1:7,633
13 (Whitecourt)	13	55,300	1:4,254
14 (Hinton)	6	24,800	1:4,133
15 (Banff)	9	22,900	1:2,544
16 (Fort McMurray)	16	48,700	1:3,044
17 (High Level)	6	50,600	1:8,433
18 (Grande Cache)	1	12,500	1:12,500
19 (Grande Prairie)	18	72,100	1:4,006
Census Metropolitan Area (CMA) of Calgary	374	693,142[3]	1:1,853
Census Metropolitan Area (CMA) of Edmonton	491	785,673[3]	1:1,600
Location Unknown	4	—	—
PROVINCIAL TOTAL	**1,115**	**2,395,000**	**1:2,148**

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[1] Source: College of Physical Therapists of Alberta. Number of physical therapists registered with the College of Physical Therapists and residing in Alberta as of December 31, 1988. Excludes inactive members.

[2] Source: "(Preliminary) Population Estimates by Census Division, Alberta, 1988," Alberta Bureau of Statistics, June 1989.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

TABLE 1B
COMMUNITY BREAKDOWN OF REGISTERED PHYSICAL THERAPISTS, ALBERTA, 1988

Community by Population Size	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	374	693,142[3]	1:1,853
Census Metropolitan Area (CMA) of Edmonton	491	785,673[3]	1:1,600
10,000 to 69,999			
Camrose	5	12,968	1:2,594
Fort McMurray	15	34,949	1:2,330
Grande Prairie	12	26,648	1:2,221
Lethbridge	24	60,610	1:2,525
Lloydminster	4	10,201	1:2,550
Medicine Hat	15	42,290	1:2,819
Red Deer	35	54,839	1:1,567
Wetaskiwin	4	10,103	1:2,526
5,000 to 9,999			
Bonnyville	1	5,575	1:5,575
Brooks	3	9,464	1:3,155
Crowsnest Pass	0	6,912	—
Drumheller	0	6,366	—
Edson	3	7,323	1:2,441
High River	3	5,096	1:1,699
Hinton	3	8,846	1:2,949
Innisfail	1	5,535	1:5,535
Lacombe	2	6,110	1:3,055
Okotoks	3	5,666	1:1,889
Olds	1	5,004	1:5,004
Peace River	4	6,355	1:1,589
Ponoka	5	5,473	1:1,095
Rocky Mountain House	3	5,261	1:1,754
Slave Lake	1	5,611	1:5,611
St. Paul	1	5,128	1:5,128
Stettler	1	5,147	1:5,147
Taber	1	6,382	1:6,382
Vegreville	4	5,276	1:1,319
Whitecourt	2	6,126	1:3,063
Under 5,000	90	540,921	1:6,010
Location Unknown	4	—	—
PROVINCIAL TOTAL	**1,115**	**2,395,000**[4]	**1:2,148**

---

[1] Source: College of Physical Therapists of Alberta. Number of physical therapists registered with the College of Physical Therapists and residing in Alberta as of December 31, 1988. Excludes inactive members.

[2] Source: "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[4] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

TABLE 2
SELECTED MANPOWER STATISTICS FOR PHYSICAL THERAPISTS IN ALBERTA, 1986, 1987, AND 1988

	1986	1987	1988
Number of Registered Personnel[1]	1,043	1,135	1,115
% Change in Number of Registered Personnel	10.7%	8.8%	-1.8%
Population (Alberta)[2]	2,375,100	2,377,700	2,395,000
% Change in Population	1.1%	0.1%	0.7%
Personnel-to-Population Ratios:			
– Alberta	1:2,277	1:2,095	1:2,148

---

[1] Source: College of Physical Therapists of Alberta. Number of physical therapists registered with the College and residing in Alberta as of December 31 of the indicated year. Excludes inactive members.

[2] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

IV. Educational Programs

Prior to 1977, the University of Alberta offered a three-year diploma program and a four-year baccalaureate program in physical therapy. Now, only the four-year baccalaureate program is offered. The program produced 47 graduates in 1987-88. In addition, the University of Alberta offers a master's degree program in physical therapy which is approximately two years in length. The program produced six graduates in 1987-88.

TABLE 3
EDUCATIONAL PROGRAMS FOR
PHYSICAL THERAPISTS IN ALBERTA[1]

	1985-86	1986-87	1987-88
A. BACCALAUREATE PROGRAM			
University of Alberta			
(Program Length: 4 years)			
Enrolments:			
1st Year	45	67	66
2nd Year	43	43	60
3rd Year	40	42	38
4th Year[2]	51	57	54
Graduates:	45	48	47
B. MASTER'S PROGRAM			
University of Alberta			
(Program Length: 2 years)			
Enrolments:			
1st Year	1	4	6
2nd Year	1	2	4
3rd Year	6	1	4
Graduates:	3	1	6

---

[1] Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1988.

[2] Increases in the fourth year enrolments were due to graduates of the diploma program and diploma graduates from foreign institutions returning to complete the baccalaureate degree program.

Physicians

I. Overview

Definition: The work of physicians is concerned with preventing, diagnosing and treating human illnesses. Activities include: conducting medical examinations, making diagnoses, prescribing and giving treatment for diseases, disorders and injuries of the human body and applying preventive medicine as well as rehabilitative techniques; performing surgical operations in the treatment of injuries, diseases and disorders of the human body and engaging in clinical research within the field of activities and scope of competence.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

There were 4,092 physicians who resided in Alberta and registered with the College of Physicians and Surgeons of Alberta in 1988. Of these, 49 percent specialized in some area of medicine.[1] The number of physicians by specialty is shown in Table 4 of this chapter.

Physicians located in the Census Metropolitan Areas of Calgary and Edmonton accounted for 76 percent of the total. Approximately 11 percent were located in communities with a population of between 10,000 and 70,000, 4 percent were located in communities with a population of between 5,000 and 10,000, and 9 percent were located in communities with a population of less than 5,000. The physician-to-population ratio was 1:585 in Alberta in 1988.

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[1] Source: College of Physicians and Surgeons of Alberta. Number of physicians registered with the College of Physicians and Surgeons as of February 15, 1989. Excludes out-of-province, retired, and non-practising life members, and members on the courtesy or education registries.

II. Professional Association and Legislation Information

a) Licensing, Registration or Certification Authority:

College of Physicians and Surgeons of Alberta
9901 – 108 Street N.W.
Edmonton, Alberta
T5K 1G9

Registrar: Dr. L. H. leRiche

President: Dr. M. H. Atkinson

b) Professional Association:

Alberta Medical Association
#300, 9901 – 108 Street
Edmonton, Alberta
T5K 1G8

Executive Director: Dr. Robert A. Burns

President: Dr. Sandy J. Murray

c) Legislation:

Under the authority of the Medical Profession Act, all individuals who wish to practise as physicians or osteopaths must be currently registered with the College of Physicians and Surgeons of Alberta.

Besides registration, the College of Physicians and Surgeons of Alberta is responsible for regulating the conduct of physicians and osteopaths and for maintaining professional discipline. The Medical Profession Act sets the basic educational qualifications required for registration with the College. However, the College sets the post-basic educational qualifications required for registration as a medical specialist and also prescribes the conditions of practice of other physicians registered on special registries.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF REGISTERED PHYSICIANS, ALBERTA, 1988

Census Division (Major Urban Centre)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	75	57,400	1:765
2 (Lethbridge)	161	115,800	1:719
3 (Pincher Creek)	40	35,400	1:885
4 (Hanna)	12	12,300	1:1,025
5 (Drumheller)	31	38,700	1:1,248
6 (Calgary excluding CMA)	56	38,058	1:680
7 (Stettler)	32	40,900	1:1,278
8 (Red Deer)	174	119,200	1:685
9 (Rocky Mountain House)	11	16,300	1:1,482
10 (Camrose)	73	79,100	1:1,084
11 (Edmonton excluding CMA)	22	30,227	1:1,374
12 (Bonnyville)	45	45,800	1:1,018
13 (Whitecourt)	38	55,300	1:1,455
14 (Hinton)	22	24,800	1:1,127
15 (Banff)	35	22,900	1:654
16 (Fort McMurray)	38	48,700	1:1,282
17 (High Level)	31	50,600	1:1,632
18 (Grande Cache)	7	12,500	1:1,786
19 (Grande Prairie)	76	72,100	1:949
Census Metropolitan Area (CMA) of Calgary	1,361	693,142[3]	1:509
Census Metropolitan Area (CMA) of Edmonton	1,752	785,673[3]	1:448
PROVINCIAL TOTAL	**4,092**	**2,395,000**	**1:585**

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[1] Source: College of Physicians and Surgeons of Alberta. Number of physicians registered with the College of Physicians and Surgeons as of February 15, 1989. Excludes out-of-province, retired, and non-practising life members, and members on the courtesy or education registries.

[2] Source: "(Preliminary) Population Estimates by Census Division, Alberta, 1988," Alberta Bureau of Statistics, June 1989.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

TABLE 1B
COMMUNITY BREAKDOWN OF REGISTERED PHYSICIANS, ALBERTA, 1988

Community by Population Size	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	1,361	693,142[3]	1:509
Census Metropolitan Area (CMA) of Edmonton	1,752	785,673[3]	1:448
10,000 to 69,999			
Camrose	21	12,968	1:618
Fort McMurray	30	34,949	1:1,165
Grande Prairie	45	26,648	1:592
Lethbridge	124	60,610	1:489
Lloydminster	13	10,201	1:785
Medicine Hat	67	42,290	1:631
Red Deer	114	54,839	1:481
Wetaskiwin	20	10,103	1:505
5,000 to 9,999			
Bonnyville	10	5,575	1:558
Brooks	10	9,464	1:946
Crowsnest Pass	5	6,912	1:1,382
Drumheller	13	6,366	1:490
Edson	9	7,323	1:814
High River	9	5,096	1:566
Hinton	13	8,846	1:680
Innisfail	9	5,535	1:615
Lacombe	10	6,110	1:611
Okotoks	7	5,666	1:809
Olds	5	5,004	1:1,001
Peace River	9	6,355	1:706
Ponoka	22	5,473	1:249
Rocky Mountain House	11	5,261	1:478
Slave Lake	8	5,611	1:701
St. Paul	7	5,128	1:733
Stettler	8	5,147	1:643
Taber	7	6,382	1:912
Vegreville	8	5,276	1:660
Whitecourt	5	6,126	1:1,225
Under 5,000	360	540,921	1:1,503
PROVINCIAL TOTAL	**4,092**	**2,395,000[4]**	**1:585**

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[1] Source: College of Physicians and Surgeons of Alberta. Number of physicians registered with the College of Physicians and Surgeons as of February 15, 1989. Excludes out-of-province, retired, and non-practising life members, and members on the courtesy or education registries.

[2] Source: "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[4] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

TABLE 2
SELECTED MANPOWER STATISTICS FOR PHYSICIANS IN ALBERTA, 1986, 1987, AND 1988

	1986	1987	1988
Number of Registered Personnel	3,906[1]	4,005[1]	4,092[2]
% Change in Number of Registered Personnel	3.5%	2.5%	2.2%
Population (Alberta)[3]	2,375,100	2,377,700	2,395,000
% Change in Population	1.1%	0.1%	0.7%
Personnel-to-Population Ratios:			
– Alberta	1:608	1:594	1:585

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[1] Source: College of Physicians and Surgeons of Alberta. Number of physicians who were registered with the College of Physicians and Surgeons of Alberta as of December 31 of the indicated year. Excludes out-of-province, retired, and non-practising life members, and members on the courtesy or education registries.

[2] Source: College of Physicians and Surgeons of Alberta. Number of physicians who were registered with the College of Physicians and Surgeons of Alberta as of February 15, 1989. Excludes out-of-province, retired, and non-practising life members, and members on the courtesy or education registries.

[3] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

IV. Educational Programs

Alberta has two medical schools: one at the University of Alberta in Edmonton, and the other at the University of Calgary. The University of Alberta program is four years in length, based on a nine-month academic year; the University of Calgary program is three years in length, based on a 12-month academic year. Successful completion of a two-year pre-medicine program is the basic entry requirement for both programs. The two programs together produced 183 graduates in 1987-88.

Under the Medical Profession Act, three post-graduate training routes are available for physicians seeking to meet licensure requirements in Alberta. Physicians applying for general licensure must have successfully completed either the certification requirements of a Family Medicine Program approved by the College of Physicians and Surgeons of Alberta, or a two-year pre-licensure training program which meets the requirements specified by the College of Physicians and Surgeons of Alberta. To be licensed as a specialist, the applicant must complete an approved residency training program in an accredited institution and must pass the certification examinations set by the Royal College of Physicians and Surgeons of Canada.

With respect to post-graduate medical training, the Department of Health establishes the number of funded intern/residency positions with the co-operation of the two medical schools. The medical schools, in co-operation with teaching hospitals in Calgary and Edmonton, then apportion the total funded positions among the various medical specialties. During the 1988-89 academic year, 666 full-time-equivalent intern/residency positions in Alberta teaching hospitals were funded by the Department of Health.

TABLE 3
EDUCATIONAL PROGRAMS FOR PHYSICIANS IN ALBERTA[1]

	1985-86	1986-87	1987-88
DOCTOR OF MEDICINE			
University of Alberta			
(Program Length: 4 years)			
Enrolments:			
1st Year	119	121	122
2nd Year	116	120	110
3rd Year	119	110	121
4th Year	117	122	121
Graduates:	109	115	119
University of Calgary			
(Program Length: 3 years)			
Enrolments:			
1st Year	74	73	74
2nd Year	71	72	73
3rd Year	71	73	68
Graduates:	69	72	64
PROVINCIAL TOTAL			
Number of Training Programs: 2			
Graduates:	178	187	183

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[1] Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1988.

TABLE 4
PHYSICIANS BY SPECIALTY AND PERSONNEL-TO-POPULATION RATIOS BY SPECIALTY, ALBERTA, 1988

Specialty	Number of Physicians[1]	Personnel-to-Population Ratio[2]
Anaesthesia	165	1:14,515
Anatomical Pathology	45	1:53,222
Cardiology	40	1:59,875
Cardiovascular & Thoracic Surgery	17	1:140,882
Clinical Immunology	1	1:2,395,000
Community Medicine	18	1:133,056
Dermatology	25	1:95,800
Diagnostic Radiology	150	1:15,967
Emergency Medicine	31	1:77,258
Endocrinology/Metabolism	9	1:266,111
Gastroenterology	22	1:108,864
General Pathology	60	1:39,917
General Surgery	162	1:14,784
Geriatric Medicine	3	1:798,333
Haematological Pathology	7	1:342,143
Haematology	9	1:266,111
Infectious Diseases	7	1:342,143
Internal Medicine	333	1:7,192
Medical Biochemistry	4	1:598,750
Medical Microbiology	9	1:266,111
Medical Oncology	3	1:798,333
Nephrology	5	1:479,000
Neurology	40	1:59,875
Neuropathology	6	1:399,167
Neurosurgery	17	1:140,882
Nuclear Medicine	13	1:184,231
Obstetrics & Gynaecology	118	1:20,297
Ophthalmology	73	1:32,808
Orthopaedic Surgery	83	1:28,855
Otolaryngology	34	1:70,441
Pediatrics	162	1:14,784
Pediatric Cardiology	1	1:2,395,000
Pediatric General Surgery	3	1:798,333
Physical Medicine & Rehabilitation	12	1:199,583
Plastic Surgery	27	1:88,704
Psychiatry	173	1:13,844
Radiation Oncology	22	1:108,864
Respiratory Medicine	21	1:114,048
Rheumatology	15	1:159,667
Urology	38	1:63,026
Vascular Surgery	4	1:598,750
Total – Specialists	1,987	1:1,205
Total – Non-Specialists (Family Physicians, General Practitioners and Others)	2,105	1:1,138
GRAND TOTAL	**4,092**	**1:585**

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[1] Source: College of Physicians and Surgeons of Alberta. Number of physicians who were registered with the College of Physicians and Surgeons of Alberta as of February 15, 1989. Excludes out-of-province, retired, and non-practising life members, and members on the courtesy or education registries.

[2] Source: Ratios calculated using a provincial population of 2,395,000, as taken from "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

Podiatrists

I. Overview

Definition: A podiatrist treats ailments, diseased conditions, deformities or injuries of the human foot and the leg muscles controlling the foot; examines, diagnoses and treats such ailments, conditions, deformities or injuries but does not treat systemic diseases of bones, muscles or ligaments, or does not use X-ray equipment for purposes other than diagnostic, or does not use anaesthetics other than local.

(Source: Podiatry Act, RSA 1980)

There were 24 podiatrists who resided in Alberta and registered with the Alberta Podiatry Association (APA) in 1988.[1] All were located in five major urban centres: the Census Metropolitan Areas of Calgary and Edmonton, and the cities of Red Deer, Lethbridge and Medicine Hat. The provincial podiatrist-to-population ratio was 1:99,792 in 1988.

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[1] Source: Alberta Podiatry Association. Number of podiatrists registered with the APA and residing in Alberta as of December 31, 1988.

II. Professional Association and Legislation Information

a) Licensing, Registration or Certification Authority:

Board of Examiners in Podiatry
c/o Professions and Occupations Bureau
5th Floor, Kensington Place
10011 – 109 Street
Edmonton, Alberta
T5J 3S8

b) Professional Association:

Alberta Podiatry Association
134 – 8500 MacLeod Trail
Calgary, Alberta
T2H 2N1

President: Dr. Paul Kruper

c) Legislation:

In Alberta, podiatrists are regulated by the Podiatry Act. In accordance with this statute, individuals who wish to practise as podiatrists in Alberta apply to the Board of Examiners in Podiatry, a provincial certification body. The Board sets the educational qualifications required for registration and certifies eligible individuals. Successful candidates register with the Alberta Podiatry Association (APA), the professional body responsible for registration and discipline of its members.

In June 1987, an amendment to the Podiatry Act removed the exclusive scope of practice clause in order to allow other qualified individuals, such as nurses, to offer foot care services. Although the mandatory requirements of the Act have been removed, individuals who wish to practise podiatry and bill services to the provincial health care insurance program are still required to obtain certification through the Board and maintain membership in the Association.

In April 1988, the Alberta Podiatry Association applied to the Health Disciplines Board for designation under the Health Disciplines Act. The Board has not completed its investigation on whether the discipline should be regulated under the Act.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF REGISTERED PODIATRISTS, ALBERTA, 1988

Census Division (Major Urban Centre)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	1	57,400	1:57,400
2 (Lethbridge)	1	115,800	1:115,800
8 (Red Deer)	1	119,200	1:119,200
All Other Census Divisions	0	623,785[3]	—
Census Metropolitan Area (CMA) of Calgary	13	693,142[4]	1:53,319
Census Metropolitan Area (CMA) of Edmonton	8	785,673[4]	1:98,209
PROVINCIAL TOTAL	**24**	**2,395,000**	**1:99,792**

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[1] Source: Alberta Podiatry Association. Number of podiatrists registered with the APA and residing in Alberta as of December 31, 1988.

[2] Source: "(Preliminary) Population Estimates by Census Division, Alberta, 1988," Alberta Bureau of Statistics, June 1989.

[3] Source: Calculated as the difference between the provincial population and the combined populations of Census Division 1, Census Division 2, Census Division 8, CMA Calgary and CMA Edmonton, as presented in Table 1A above.

[4] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

TABLE 1B
COMMUNITY BREAKDOWN OF REGISTERED PODIATRISTS, ALBERTA, 1988

Community by Population Size	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	13	693,142[3]	1:53,319
Census Metropolitan Area (CMA) of Edmonton	8	785,673[3]	1:98,209
10,000 to 69,999			
Camrose	0	12,968	—
Fort McMurray	0	34,949	—
Grande Prairie	0	26,648	—
Lethbridge	1	60,610	1:60,610
Lloydminster	0	10,201	—
Medicine Hat	1	42,290	1:42,290
Red Deer	1	54,839	1:54,839
Wetaskiwin	0	10,103	—
5,000 to 9,999			
Bonnyville	0	5,575	—
Brooks	0	9,464	—
Crowsnest Pass	0	6,912	—
Drumheller	0	6,366	—
Edson	0	7,323	—
High River	0	5,096	—
Hinton	0	8,846	—
Innisfail	0	5,535	—
Lacombe	0	6,110	—
Okotoks	0	5,666	—
Olds	0	5,004	—
Peace River	0	6,355	—
Ponoka	0	5,473	—
Rocky Mountain House	0	5,261	—
Slave Lake	0	5,611	—
St. Paul	0	5,128	—
Stettler	0	5,147	—
Taber	0	6,382	—
Vegreville	0	5,276	—
Whitecourt	0	6,126	—
Under 5,000	0	540,921	—
PROVINCIAL TOTAL	**24**	**2,395,000[4]**	**1:99,792**

---

[1] Source: Alberta Podiatry Association. Number of podiatrists registered with the APA and residing in Alberta as of December 31, 1988.

[2] Source: "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[4] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

TABLE 2
SELECTED MANPOWER STATISTICS FOR PODIATRISTS IN ALBERTA, 1986, 1987, AND 1988

	1986	1987	1988
Number of Registered Personnel[1]	19	21	24
% Change in Number of Registered Personnel	5.6%	10.5%	14.3%
Population (Alberta)[2]	2,375,100	2,377,700	2,395,000
% Change in Population	1.1%	0.1%	0.7%
Personnel-to-Population Ratios:			
– Alberta	1:125,005	1:113,224	1:99,792
– Western Canada[3]	1:106,783	—	—

IV. Educational Programs

There are no training programs for podiatrists in Canada. The United States has seven schools of podiatry. The programs consist of four years of professional training with four prerequisite years of university studies. All of Alberta's podiatrists were trained in the United States.

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[1] Source: Alberta Podiatry Association. Number of podiatrists registered with the APA and residing in Alberta as of December 31 of the indicated year.

[2] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

[3] Source: Ratio for the provinces of Manitoba, Saskatchewan, Alberta and British Columbia combined derived from, **Health Personnel in Canada — 1987**. Ottawa, Ontario: Department of National Health and Welfare, December 1988.

Prosthetists and Orthotists

I. Overview

Definition: Design, build, fit and repair prosthetic and orthotic appliances to correct physical defects of human body. Interpret physician's specifications for prosthesis (artificial limb) or orthosis (support or brace). Measure patient for appliance. Design or draw working sketch or model of prosthesis or orthosis required. Build or direct other workers to build prosthetic or orthotic appliance, using materials, such as plastic, wood, leather, steel, aluminium and padding, and machine and hand-tools. Fit patient with appliance and add or remove padding, adjust parts and change tension to achieve maximum comfort and optimum function. Revise working sketch to reflect changes and direct other workers to modify appliance. Advise patient in application, use and care of appliance. Service and repair appliance as necessary.

(Souce: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

Since registration with the Alberta Association of Prosthetists and Orthotists is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1988 by the Alberta Health and Social Services Disciplines Committee, was used as an alternative source of manpower information.

There were 28 prosthetists and orthotists practising in Alberta in 1988.[1] All were employed in the Census Metropolitan Areas of Calgary and Edmonton. These individuals are employed in acute care hospitals, auxiliary hospitals, community agencies and in private practice. The provincial prosthetist/orthotist-to-population ratio was 1:85,536 in 1988.

II. Professional Association and Legislation Information

a) Licensing, Registration or Certification Authority:

None.

b) Professional Association:

Alberta Association of Prosthetists and Orthotists
10745 – 124 Street
Edmonton, Alberta
T5M 0H2

President: Mr. Frank Hayday

c) Legislation:

There is no legislation regulating prosthetists and orthotists in Alberta at present. In October 1988, the Alberta Association of Prosthetists and Orthotists applied for designation under the Health Disciplines Act. The Health Disciplines Board will conduct an investigation to determine if the discipline should be regulated under the Act.

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1988," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF PRACTISING PROSTHETISTS AND ORTHOTISTS, ALBERTA, 1988

Census Division (Major Urban Centre)	Number Practising[1]	Population	Personnel-to-Population Ratio
Census Metropolitan Area (CMA) of Calgary	10	693,142[2]	1:69,314
Census Metropolitan Area (CMA) of Edmonton	18	785,673[2]	1:43,649
Areas other than CMA Calgary and CMA Edmonton	0	916,185[3]	—
PROVINCIAL TOTAL	**28**	**2,395,000**[4]	**1:85,536**

TABLE 1B
COMMUNITY BREAKDOWN OF PRACTISING PROSTHETISTS AND ORTHOTISTS, ALBERTA, 1988

Community by Population Size	Number Practising[1]	Population	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	10	693,142[2]	1:69,314
Census Metropolitan Area (CMA) of Edmonton	18	785,673[2]	1:43,649
All Other Communities	0	916,185[3]	—
PROVINCIAL TOTAL	**28**	**2,395,000**[4]	**1:85,536**

---

[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1988," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[3] Source: Calculated as the difference between the provincial population and the combined populations of CMA Calgary and CMA Edmonton, as presented in Table 1A above.

[4] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

TABLE 2
SELECTED MANPOWER STATISTICS FOR PROSTHETISTS AND ORTHOTISTS IN ALBERTA, 1986, 1987, AND 1988

	1986	1987	1988
Number of Practising Personnel[1]	31	34	28
% Change in Number of Practising Personnel	-18.4%	9.6%	-17.6%
Population (Alberta)[2]	2,375,100	2,377,700	2,395,000
% Change in Population	1.1%	0.1%	0.7%
Personnel-to-Population Ratios:			
– Alberta	1:76,616	1:69,932	1:85,536

IV. Educational Programs

There are no formal training programs for prosthetists and orthotists in Alberta. Although many of the prosthetists and orthotists in the province are trained on the job, some have been trained in post-secondary educational institutions in other provinces such as the British Columbia Institute of Technology (BCIT). Alberta renewed its inter-provincial training agreement with BCIT and the British Columbia Government in 1986 to purchase training places for Alberta students. The number of places reserved was increased from two to three every two years.

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[1] Sources: "Health and Social Service Personnel Working in Alberta, March 31," 1986, 1987 and 1988 editions, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

Psychiatric Nurses

I. Overview

Definition: Provide nursing care to patients with mental and emotional problems in hospitals and clinics or in private homes. Administer prescribed medications and treatments and attend to total nursing care of assigned patients. Observe, record and report symptoms and changes in patient's condition. Confer with psychiatrists, psychologists, social workers, occupational therapists and other specialists to evaluate patient's condition and to plan therapy. Encourage patients to participate in routine work functions and recreational, community and other activities to build self-confidence and to develop relationships with others. Counsel patients at home or in clinic and evaluate patient's adjustment in community.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

There were 1,132 psychiatric nurses who resided in Alberta and were active members of the Registered Psychiatric Nurses Association of Alberta (RPNAA) on December 31, 1988.[1]

Psychiatric nurses located in the Census Metropolitan Areas of Calgary and Edmonton accounted for 61 percent of those registered with the RPNAA. The psychiatric nurse-to-population ratio was 1:2,116 in Alberta in 1988.

II. Professional Association and Legislation Information

a) Professional Association/Registration Body:

Registered Psychiatric Nurses Association of Alberta
#201, 9711 – 45 Avenue
Edmonton, Alberta
T6E 5V8

Executive Director: Mr. Tim Schultz

President: Mr. David Somers

b) Legislation:

Since January 1, 1988, psychiatric nurses have been regulated under the Health Disciplines Act. The Registered Psychiatric Nurses Association of Alberta is designated under the Act as the body responsible for registration of members and handling of complaints. Through regulations, the Health Disciplines Board sets the educational qualifications required for registration. The regulations also reserve the titles "psychiatric nurse" and "registered psychiatric nurse" for registered members.

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[1] Source: Registered Psychiatric Nurses Association of Alberta. Number of active psychiatric nurses registered with the RPNAA and residing in Alberta as of December 31, 1988.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF REGISTERED PSYCHIATRIC NURSES, ALBERTA, 1988

Census Division (Major Urban Centre)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	11	57,400	1:5,218
2 (Lethbridge)	31	115,800	1:3,735
3 (Pincher Creek)	26	35,400	1:1,362
4 (Hanna)	3	12,300	1:4,100
5 (Drumheller)	5	38,700	1:7,740
6 (Calgary excluding CMA)	2	38,058	1:19,029
7 (Stettler)	5	40,900	1:8,180
8 (Red Deer)	244	119,200	1:489
9 (Rocky Mountain House)	1	16,300	1:16,300
10 (Camrose)	39	79,100	1:2,028
11 (Edmonton excluding CMA)	6	30,227	1:5,038
12 (Bonnyville)	12	45,800	1:3,817
13 (Whitecourt)	5	55,300	1:11,060
14 (Hinton)	4	24,800	1:6,200
15 (Banff)	1	22,900	1:22,900
16 (Fort McMurray)	5	48,700	1:9,740
17 (High Level)	3	50,600	1:16,867
18 (Grande Cache)	5	12,500	1:2,500
19 (Grande Prairie)	31	72,100	1:2,326
Census Metropolitan Area (CMA) of Calgary	164	693,142[3]	1:4,226
Census Metropolitan Area (CMA) of Edmonton	527	785,673[3]	1:1,491
Location Unknown	2	—	—
PROVINCIAL TOTAL	**1,132**	**2,395,000**	**1:2,116**

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[1] Source: Registered Psychiatric Nurses Association of Alberta. Number of active psychiatric nurses registered with the RPNAA and residing in Alberta as of December 31, 1988.

[2] Source: "(Preliminary) Population Estimates by Census Division, Alberta, 1988," Alberta Bureau of Statistics, June 1989.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

TABLE 1B
COMMUNITY BREAKDOWN OF REGISTERED PSYCHIATRIC NURSES, ALBERTA, 1988

Community by Population Size	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	164	693,142[3]	1:4,226
Census Metropolitan Area (CMA) of Edmonton	527	785,673[3]	1:1,491
10,000 to 69,999			
Camrose	25	12,968	1:519
Fort McMurray	5	34,949	1:6,990
Grande Prairie	22	26,648	1:1,211
Lethbridge	23	60,610	1:2,635
Lloydminster	0	10,201	—
Medicine Hat	7	42,290	1:6,041
Red Deer	35	54,839	1:1,567
Wetaskiwin	0	10,103	—
5,000 to 9,999			
Bonnyville	3	5,575	1:1,858
Brooks	0	9,464	—
Crowsnest Pass	0	6,912	—
Drumheller	4	6,366	1:1,592
Edson	1	7,323	1:7,323
High River	0	5,096	—
Hinton	1	8,846	1:8,846
Innisfail	6	5,535	1:923
Lacombe	19	6,110	1:322
Okotoks	0	5,666	—
Olds	1	5,004	1:5,004
Peace River	4	6,355	1:1,589
Ponoka	172	5,473	1:32
Rocky Mountain House	1	5,261	1:5,261
Slave Lake	1	5,611	1:5,611
St. Paul	6	5,128	1:855
Stettler	1	5,147	1:5,147
Taber	1	6,382	1:6,382
Vegreville	2	5,276	1:2,638
Whitecourt	0	6,126	—
Under 5,000	99	540,921	1:5,464
Location Unknown	2	—	—
PROVINCIAL TOTAL	**1,132**	**2,395,000[4]**	**1:2,116**

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[1] Source: Registered Psychiatric Nurses Association of Alberta. Number of active psychiatric nurses registered with the RPNAA and residing in Alberta as of December 31, 1988.

[2] Source: "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[4] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

TABLE 2
SELECTED MANPOWER STATISTICS FOR PSYCHIATRIC NURSES IN ALBERTA, 1986, 1987, AND 1988

	1986	1987	1988
Number of Registered Personnel[1]	1,031	1,018	1,132
% Change in Number of Registered Personnel	N/A	-1.3%	11.2%
Population (Alberta)[2]	2,375,100	2,377,700	2,395,000
% Change in Population	1.1%	0.1%	0.7%
Personnel-to-Population Ratios:			
– Alberta	1:2,304	1:2,336	1:2,116

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[1] Source: Registered Psychiatric Nurses Association of Alberta. Number of psychiatric nurses registered with the RPNAA and residing in Alberta as of December 31, 1986, March 22, 1988 and December 31, 1988.

[2] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

IV. Educational Programs

Both Alberta Hospital, Edmonton and Alberta Hospital, Ponoka offer a two-year hospital-based psychiatric nursing diploma program. The two programs together produced 48 graduates in 1987-88. Before students are eligible for registration, they must pass an examination approved by the Health Disciplines Board.

TABLE 3
EDUCATIONAL PROGRAMS FOR PSYCHIATRIC NURSES IN ALBERTA[1]

	1985-86	1986-87	1987-88
PSYCHIATRIC NURSING DIPLOMA			
Alberta Hospital — Edmonton			
(Program Length: 2 years)			
Enrolments:			
1st Year	42	40	20
2nd Year	31	30	22
Graduates:	30	23	21
Alberta Hospital — Ponoka			
(Program Length: 2 years)			
Enrolments:			
1st Year	37	40	35
2nd Year	26	30	28
Graduates:	26	28	27
PROVINCIAL TOTAL			
Number of Training Programs: 2			
Graduates:	56	51	48

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[1] Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1988.

Psychologists

I. Overview

Definition: Collect, interpret and apply scientific data for the purpose of investigating psychological phenomena and formulating and applying psychological principles and laws in predicting and controlling behaviour in society.

Study human behaviour and mental processes and investigate and recommend or provide treatment of psychological problems. Plan and carry out experiments using human beings and animal subjects, observe behaviour, and measure mental and physical characteristics. Analyze effects of hereditary and environmental factors on individual thought and behaviour. Undertake diagnosis, treatment and prevention of personality disorders and problems of maladjustment to social and occupational environment.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

There were 1,174 chartered psychologists who resided in Alberta and registered with the Psychologists Association of Alberta (PAA) in 1988.[1] Not all chartered psychologists practise in the health care and social service sector. According to a manpower survey conducted by the Alberta Health and Social Services Disciplines Committee, there were 857 psychologists employed in health care and social service agencies and institutions in Alberta in 1988.[2]

Psychologists in the Census Metropolitan Areas of Calgary and Edmonton accounted for 83 percent of the total registered. The provincial chartered psychologist-to-population ratio was 1:2,040 in 1988.

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[1] Source: Psychologists Association of Alberta. Number of chartered psychologists registered with the PAA and residing in Alberta as of December 31, 1988. Excludes associate and student members.

[2] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1988," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

II. Professional Association and Legislation Information

a) Professional Association/Registration Body:

Psychologists Association of Alberta
Suite 400, Sunlife Place
10123 – 99 Street
Edmonton, Alberta
T5J 3H1

Registrar/Executive Director: Dr. Carroll Ganam

President: Dr. Leendert P. Mos

President Elect: Dr. Stanley Whitsett

b) Legislation:

Psychologists are governed by the Psychology Profession Act which was proclaimed in March 1987 (except Section 15(1)).

Under the new act, the titles "psychologist" and "chartered psychologist" alone or in combination with other words are reserved for registered members. Non-registered members may still practise if this restriction is observed.

In addition, the titles "psychological associate in school psychology" and "psychological assistant" are reserved by regulation. Individuals who use titles which imply they are psychologists are contravening the legislation if they are not registered with the Psychologists Association of Alberta.

The Psychologists Association of Alberta is now responsible for registration, practice review and maintaining professional discipline. The Psychology Profession Act and Regulation set the basic educational qualifications required for registration as a psychologist. The Universities Coordinating Council has the authority to approve academic programs and determine equivalencies for registration as a chartered psychologist.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF REGISTERED PSYCHOLOGISTS, ALBERTA, 1988

Census Division (Major Urban Centre)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	7	57,400	1:8,200
2 (Lethbridge)	32	115,800	1:3,619
3 (Pincher Creek)	6	35,400	1:5,900
4 (Hanna)	0	12,300	—
5 (Drumheller)	5	38,700	1:7,740
6 (Calgary excluding CMA)	9	38,058	1:4,229
7 (Stettler)	0	40,900	—
8 (Red Deer)	55	119,200	1:2,167
9 (Rocky Mountain House)	1	16,300	1:16,300
10 (Camrose)	4	79,100	1:19,775
11 (Edmonton excluding CMA)	2	30,227	1:15,114
12 (Bonnyville)	5	45,800	1:9,160
13 (Whitecourt)	15	55,300	1:3,687
14 (Hinton)	2	24,800	1:12,400
15 (Banff)	3	22,900	1:7,633
16 (Fort McMurray)	9	48,700	1:5,411
17 (High Level)	1	50,600	1:50,600
18 (Grande Cache)	1	12,500	1:12,500
19 (Grande Prairie)	9	72,100	1:8,011
Census Metropolitan Area (CMA) of Calgary	465	693,142[3]	1:1,491
Census Metropolitan Area (CMA) of Edmonton	504	785,673[3]	1:1,559
Location Unknown	39	—	—
PROVINCIAL TOTAL	**1,174**	**2,395,000**	**1:2,040**

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[1] Source: Psychologists Association of Alberta. Number of chartered psychologists registered with the PAA and residing in Alberta as of December 31, 1988. Excludes associate and student members.

[2] Source: "(Preliminary) Population Estimates by Census Division, Alberta, 1988," Alberta Bureau of Statistics, June 1989.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

TABLE 1B

COMMUNITY BREAKDOWN OF REGISTERED PSYCHOLOGISTS, ALBERTA, 1988

Community by Population Size	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	465	693,142[3]	1:1,491
Census Metropolitan Area (CMA) of Edmonton	504	785,673[3]	1:1,559
10,000 to 69,999			
Camrose	3	12,968	1:4,323
Fort McMurray	6	34,949	1:5,825
Grande Prairie	5	26,648	1:5,330
Lethbridge	28	60,610	1:2,165
Lloydminster	0	10,201	—
Medicine Hat	7	42,290	1:6,041
Red Deer	42	54,839	1:1,306
Wetaskiwin	2	10,103	1:5,052
5,000 to 9,999			
Bonnyville	2	5,575	1:2,788
Brooks	1	9,464	1:9,464
Crowsnest Pass	0	6,912	—
Drumheller	4	6,366	1:1,592
Edson	1	7,323	1:7,323
High River	2	5,096	1:2,548
Hinton	1	8,846	1:8,846
Innisfail	1	5,535	1:5,535
Lacombe	0	6,110	—
Okotoks	2	5,666	1:2,833
Olds	2	5,004	1:2,502
Peace River	2	6,355	1:3,178
Ponoka	8	5,473	1:684
Rocky Mountain House	1	5,261	1:5,261
Slave Lake	0	5,611	—
St. Paul	2	5,128	1:2,564
Stettler	0	5,147	—
Taber	1	6,382	1:6,382
Vegreville	0	5,276	—
Whitecourt	3	6,126	1:2,042
Under 5,000	40	540,921	1:13,523
Location Unknown	39	—	—
PROVINCIAL TOTAL	**1,174**	**2,395,000[4]**	**1:2,040**

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[1] Source: Psychologists Association of Alberta. Number of chartered psychologists registered with the PAA and residing in Alberta as of December 31, 1988. Excludes associate and student members.

[2] Source: "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[4] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

TABLE 2
SELECTED MANPOWER STATISTICS FOR PSYCHOLOGISTS IN ALBERTA, 1986, 1987, AND 1988

	1986	1987	1988
Number of Registered Personnel[1]	1,097	1,121	1,174
% Change in Number of Registered Personnel	-2.5%	2.2%	4.7%
Population (Alberta)[2]	2,375,100	2,377,700	2,395,000
% Change in Population	1.1%	0.1%	0.7%
Personnel-to-Population Ratios:			
– Alberta	1:2,165	1:2,121	1:2,040

IV. Educational Programs

There are six master's degree programs in psychology in Alberta: Master of Science at the University of Calgary, Master of Arts and Master of Science at the University of Alberta, Master of Education in Educational Psychology at the University of Alberta and the University of Calgary, and Master of Science in Educational Psychology at the University of Calgary. These programs produced 117 graduates in 1987-88.

In addition, the University of Alberta and the University of Calgary have doctoral programs in both psychology and educational psychology. There were 30 graduates from these programs in 1987-88.

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[1] Source: Psychologists Association of Alberta. Number of chartered psychologists registered with the PAA and residing in Alberta as of December 31 of the indicated year. Excludes associate and student members.

[2] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

TABLE 3
EDUCATIONAL PROGRAMS FOR PSYCHOLOGISTS IN ALBERTA[1]

	1985-86	1986-87	1987-88
A. MASTER'S PROGRAMS			
University of Alberta Master of Arts in Psychology (Program Length: variable)			
Enrolments:			
1st Year	5	3	1
2nd Year	3	5	2
3rd Year[2]	3	2	5
Graduates:	4	2	6
University of Alberta Master of Science in Psychology (Program Length: variable)			
Enrolments:			
1st Year	2	5	5
2nd Year	6	2	4
3rd Year[2]	4	4	2
Graduates:	5	4	4
University of Alberta Master of Education in Educational Psychology (Program Length: 4 years)			
Enrolments:			
1st Year	61	51	69
2nd Year[3]	126	123	80
Graduates:	34	50	62
University of Calgary Master of Science in Psychology (Program Length: variable)			
Enrolments:			
1st Year	15	7	8
2nd Year	9	14	10
3rd Year[2]	13	9	4
Graduates:	10	13	16

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[1] Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1988.

[2] Third year refers to students enrolled in third and later years of the program.

[3] Second year refers to students enrolled in second and later years of the program.

TABLE 3 continued
EDUCATIONAL PROGRAMS FOR PSYCHOLOGISTS IN ALBERTA[1]

	1985-86	1986-87	1987-88
University of Calgary Master of Education in Educational Psychology (Program Length: variable)			
Enrolments:			
1st Year	22	32	14
2nd Year[2]	51	56	50
Graduates:	22	13	19
University of Calgary Master of Science in Educational Psychology (Program Length: variable)			
Enrolments:			
1st Year	10	20	23
2nd Year[2]	38	42	36
Graduates:[3]	15	20	10
PROVINCIAL TOTAL Number of Master's Programs: 6			
Graduates:	90	102	117
B. DOCTORAL PROGRAMS University of Alberta Ph.D. in Psychology (Program Length: approx. 2 years)			
Enrolments:			
1st Year	—	5	5
2nd Year	3	—	5
3rd Year[4]	10	7	5
Graduates:	3	1	3

---

[1] Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1988.

[2] Second year refers to students enrolled in second and later years of the program.

[3] The graduate figures refer to those students who convocated in a given year and do not include students only recommended to pass.

[4] Third year refers to students enrolled in third and later years of the program.

TABLE 3 continued
EDUCATIONAL PROGRAMS FOR PSYCHOLOGISTS IN ALBERTA[1]

	1985-86	1986-87	1987-88
University of Alberta Ph.D. in Educational Psychology (Maximum Program Length: 6 years)[2]			
Enrolments:			
1st Year	20	36	34
2nd Year[3]	93	98	99
Graduates:	19	13	17
University of Calgary Ph.D. in Psychology (Program Length: approx. 3 years)			
Enrolments:			
1st year	2	2	3
2nd Year	4	1	6
3rd Year[4]	7	9	8
Graduates:	2	1	2
University of Calgary Ph.D. in Educational Psychology (Maximum Program Length: 6 years)			
Enrolments:			
1st Year	4	6	5
2nd Year[3]	35	33	31
Graduates:	6	9	8
PROVINCIAL TOTAL Number of Ph.D. Programs: 4			
Graduates:	30	24	30

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[1] Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1988.

[2] Ph.D. programs require a two-year residency, though the norm for completion is 3 to 4 years.

[3] Second year refers to students enrolled in second and later years of the program.

[4] Third year refers to students enrolled in third and later years of the program.

Public Health Inspectors

I. Overview

Definition: Public health inspectors within Alberta are Executive Officers of the Department of Health or the 27 local boards of health and are empowered to enforce the Public Health Act and regulations under the Act. Public health inspectors provide advice to the general public, industry, municipal, provincial and federal government agencies on matters pertaining to public and environmental health. They carry out inspections of food establishments, public housing, feed lots, piggeries, fur farms, poultry operations, rabbit keeping operations, recreation areas, work camps, abattoirs, wells, fountains, cisterns, water tanks, public lavatories, solid waste management facilities, institutions, swimming pools, dairies, private housing, public places, and any other place or building where a condition that is or might become injurious or dangerous to the public health, or that might hinder in any manner the prevention or suppression of disease. Public health inspectors provide written reports of inspections and where necessary recommend permitting or non-permitting of facilities. Where necessary, public health inspectors may issue an order verbally or in the written form where they have reasonable and probable grounds to believe that a nuisance exists in or on the public place or private place that was the subject of inspection or that the place or the owner of it or any other person is in contravention of the Public Health Act or regulations under the Act. Public health inspectors take samples of water, milk, food and air and order chemical, physical or biological tests to determine contamination. Public health inspectors carry out investigations into food-borne illnesses, enteric disease, indoor air quality, and other public or environmental health issues. They carry out surveys, environmental health impact assessments and provide service in incidents of natural or man-made disasters such as uncontrolled releases of sour gas and hydrogen sulphide emissions. Public health inspectors provide various educational topics to the general public or industry in public or environmental health at public meetings or in an educational setting.

(Source: Alberta Health).

Public health inspectors are also known as environmental health officers. They are employed by federal, provincial and municipal governments, by educational institutions, and by private companies involved in food production, petroleum engineering, and pesticide production.

Since registration with the Canadian Institute of Public Health Inspectors is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1988 by the Alberta Health and Social Services Disciplines Committee, was used as the source of manpower information.

There were 132 public health inspectors practising in Alberta in 1988.[1] Public health inspectors employed in the Census Metropolitan Areas of Calgary and Edmonton accounted for 55 percent of the total. The provincial public health inspector-to-population ratio was 1:18,144 in 1988.

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1988," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

II. Professional Association and Legislation Information

a) Licensing, Registration or Certification Authority:

Board of Certification of Public Health Inspectors
Alberta East Central Health Unit
P.O. Box 550
Stettler, Alberta
T0C 2L0

Board Chairman: Mr. Rob Elliot

b) Professional Association:

Canadian Institute of Public Health Inspectors
(Alberta Branch)
Box 2693
Drumheller, Alberta
T0J 0Y0

President: Mr. Dan Richen

c) Legislation:

Public health inspectors in Alberta are regulated under the Public Health Act. Under the legislation, all individuals who wish to practise as public health inspectors for a local board of health established under the Public Health Act or Health Unit Act must be certified by the Board of Certification of Public Health Inspectors which is administered by the Canadian Institute of Public Health Inspectors. This requirement does not apply to persons who became public health inspectors prior to January 1, 1961 and who have continued in such positions since that date.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF PRACTISING PUBLIC HEALTH INSPECTORS, ALBERTA, 1988

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	4	57,400	1:14,350
2 (Lethbridge)	8	115,800	1:14,475
3 (Pincher Creek)	2	35,400	1:17,700
4 (Hanna)	2	12,300	1:6,150
5 (Drumheller)	2	38,700	1:19,350
6 (Calgary excluding CMA)	2	38,058	1:19,029
7 (Stettler)	1	40,900	1:40,900
8 (Red Deer)	6	119,200	1:19,867
9 (Rocky Mountain House)	0	16,300	—
10 (Camrose)	6	79,100	1:13,183
11 (Edmonton excluding CMA)	1	30,227	1:30,227
12 (Bonnyville)	3	45,800	1:15,267
13 (Whitecourt)	2	55,300	1:27,650
14 (Hinton)	3	24,800	1:8,267
15 (Banff)	2	22,900	1:11,450
16 (Fort McMurray)	3	48,700	1:16,233
17 (High Level)	4	50,600	1:12,650
18 (Grande Cache)	0	12,500	—
19 (Grande Prairie)	8	72,100	1:9,013
Census Metropolitan Area (CMA) of Calgary	32	693,142[3]	1:21,661
Census Metropolitan Area (CMA) of Edmonton	41	785,673[3]	1:19,163
PROVINCIAL TOTAL	**132**	**2,395,000**	**1:18,144**

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1988," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "(Preliminary) Population Estimates by Census Division, Alberta, 1988," Alberta Bureau of Statistics, June 1989.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

TABLE 1B
COMMUNITY BREAKDOWN OF PRACTISING PUBLIC HEALTH INSPECTORS, ALBERTA, 1988

Community by Population Size	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	32	693,142[3]	1:21,661
Census Metropolitan Area (CMA) of Edmonton	41	785,673[3]	1:19,163
10,000 to 69,999			
Camrose	2	12,968	1:6,484
Fort McMurray	2	34,949	1:17,475
Grande Prairie	4	26,648	1:6,662
Lethbridge	3	60,610	1:20,203
Lloydminster	0	10,201	—
Medicine Hat	4	42,290	1:10,573
Red Deer	6	54,839	1:9,140
Wetaskiwin	1	10,103	1:10,103
5,000 to 9,999			
Bonnyville	2	5,575	1:2,788
Brooks	1	9,464	1:9,464
Crowsnest Pass	0	6,912	—
Drumheller	2	6,366	1:3,183
Edson	1	7,323	1:7,323
High River	2	5,096	1:2,548
Hinton	2	8,846	1:4,423
Innisfail	0	5,535	—
Lacombe	0	6,110	—
Okotoks	0	5,666	—
Olds	0	5,004	—
Peace River	2	6,355	1:3,178
Ponoka	0	5,473	—
Rocky Mountain House	0	5,261	—
Slave Lake	1	5,611	1:5,611
St. Paul	1	5,128	1:5,128
Stettler	1	5,147	1:5,147
Taber	1	6,382	1:6,382
Vegreville	2	5,276	1:2,638
Whitecourt	1	6,126	1:6,126
Under 5,000	18	540,921	1:30,051
PROVINCIAL TOTAL	**132**	**2,395,000[4]**	**1:18,144**

---

[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1988," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[4] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

TABLE 2
SELECTED MANPOWER STATISTICS FOR PUBLIC HEALTH INSPECTORS IN ALBERTA, 1986, 1987, AND 1988

	1986	1987	1988
Number of Practising Personnel[1]	129	126	132
% Change in Number of Practising Personnel	-1.5%	-2.3%	4.8%
Population (Alberta)[2]	2,375,100	2,377,700	2,395,000
% Change in Population	1.1%	0.1%	0.7%
Personnel-to-Population Ratios:			
– Alberta	1:18,412	1:18,871	1:18,144

IV. Educational Programs

In Canada, only two post-secondary institutions offer formal training programs for public health inspectors. Programs in environmental health are offered at the British Columbia Institute of Technology (BCIT) in Vancouver and Ryerson Polytechnical Institute in Toronto. BCIT offers a two-year diploma program; Ryerson offers a four-year baccalaureate program. Upon completion of two years of training in either of these programs, an individual is eligible to sit for the Board of Certification examination provided he/she has completed 24 weeks of field experience in a local health authority. The certification examination consists of three parts, each of which must be successfully completed to obtain a passing grade. A candidate may attempt the examination only twice.

In Alberta, Athabasca University offers correspondence courses in public health.

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[1] Sources: "Health and Social Service Personnel Working in Alberta, March 31," 1986, 1987 and 1988 editions, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

Recreational Therapists

I. Overview

Definition: Through a program of recreational activities, recreational therapists provide goal-oriented treatment services directed to rehabilitation or modification of identified physical, emotional, cognitive and social behaviors. Recreational therapists perform the following tasks: assess individual client's leisure needs; document information (treatment plan, progress and discharge summary) on client's chart; develop individualized client programs focusing on treatment, leisure education and recreation participation; provide opportunities for individual, small and large group participation in regularly scheduled activities and special events; adapt activities to meet individual client's needs; attend rehabilitation team meetings and therapeutic recreation seminars, workshops and courses; supervise and orientate students, auxiliary personnel, and volunteers assigned to the department.

(Source: Alberta Therapeutic Recreation Association, May 1989)

Since registration with the Alberta Therapeutic Recreation Association is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1989 by the Alberta Health and Social Services Disciplines Committee, was used as an alternative source of manpower information.

There were 278 recreational therapists practising in Alberta in 1988.[1] According to the survey, approximately one-third (31 percent) of these individuals were employed in nursing homes, and one-quarter (27 percent) in auxiliary hospitals. The remainder worked in acute care hospitals, psychiatric hospitals and other health and social service facilities.[2] Recreational therapists employed in the Census Metropolitan Areas of Calgary and Edmonton accounted for 59 percent of the total. The provincial recreational therapist-to-population ratio was 1:8,615 in 1988.

II. Professional Association and Legislation Information

a) Licensing, Registration or Certification Authority:

None.

b) Professional Association:

Alberta Therapeutic Recreation Association
Box 4673
Edmonton, Alberta
T6E 5G5

President: Ms. Starr Kolb

President Elect: Ms. Sue Hatfield-Cusano

c) Legislation:

There is no legislation regulating recreational therapists in Alberta at present.

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1988," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Ibid.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF PRACTISING RECREATIONAL THERAPISTS, ALBERTA, 1988

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	6	57,400	1:9,567
2 (Lethbridge)	15	115,800	1:7,720
3 (Pincher Creek)	8	35,400	1:4,425
4 (Hanna)	1	12,300	1:12,300
5 (Drumheller)	4	38,700	1:9,675
6 (Calgary excluding CMA)	6	38,058	1:6,343]
7 (Stettler)	7	40,900	1:5,843
8 (Red Deer)	38	119,200	1:3,137
9 (Rocky Mountain House)	0	16,300	—
10 (Camrose)	8	79,100	1:9,888
11 (Edmonton excluding CMA)	3	30,227	1:10,076
12 (Bonnyville)	2	45,800	1:22,900
13 (Whitecourt)	4	55,300	1:13,825
14 (Hinton)	1	24,800	1:24,800
15 (Banff)	3	22,900	1:7,633
16 (Fort McMurray)	0	48,700	—
17 (High Level)	1	50,600	1:50,600
18 (Grande Cache)	1	12,500	1:12,500
19 (Grande Prairie)	7	72,100	1:10,300
Census Metropolitan Area (CMA) of Calgary	74	693,142[3]	1:9,367
Census Metropolitan Area (CMA) of Edmonton	89	785,673[3]	1:8,828
PROVINCIAL TOTAL	**278**	**2,395,000**	**1:8,615**

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1988," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "(Preliminary) Population Estimates by Census Division, Alberta, 1988," Alberta Bureau of Statistics, June 1989.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

TABLE 1B
COMMUNITY BREAKDOWN OF PRACTISING RECREATIONAL THERAPISTS, ALBERTA, 1988

Community by Population Size	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	74	693,142[3]	1:9,367
Census Metropolitan Area (CMA) of Edmonton	89	785,673[3]	1:8,828
10,000 to 69,999			
Camrose	3	12,968	1:4,323
Fort McMurray	0	34,949	—
Grande Prairie	6	26,648	1:4,441
Lethbridge	8	60,610	1:7,576
Lloydminster	1	10,201	1:10,201
Medicine Hat	6	42,290	1:7,048
Red Deer	25	54,839	1:2,194
Wetaskiwin	3	10,103	1:3,368
5,000 to 9,999			
Bonnyville	1	5,575	1:5,575
Brooks	4	9,464	1:2,366
Crowsnest Pass	2	6,912	1:3,456
Drumheller	1	6,366	1:6,366
Edson	1	7,323	1:7,323
High River	2	5,096	1:2,548
Hinton	0	8,846	—
Innisfail	3	5,535	1:1,845
Lacombe	0	6,110	—
Okotoks	0	5,666	—
Olds	1	5,004	1:5,004
Peace Rive	1	6,355	1:6,355
Ponoka	10	5,473	1:547
Rocky Mountain House	0	5,261	—
Slave Lake	0	5,611	—
St. Paul	1	5,128	1:5,128
Stettler	2	5,147	1:2,574
Taber	2	6,382	1:3,191
Vegreville	1	5,276	1:5,276
Whitecourt	0	6,126	—
Under 5,000	31	540,921	1:17,449
PROVINCIAL TOTAL	**278**	**2,395,000[4]**	**1:8,615**

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[1] Source: "Health and Social Services Personnel Working in Alberta, March 31, 1988," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[4] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

TABLE 2
SELECTED MANPOWER STATISTICS FOR RECREATIONAL THERAPISTS IN ALBERTA, 1986, 1987, AND 1988

	1986	1987	1988
Number of Practising Personnel[1]	207	262	278
% Change in Number of Practising Personnel	0.5%	26.6%	6.1%
Population (Alberta)[2]	2,375,100	2,377,700	2,395,000
% Change in Population	1.1%	0.1%	0.7%
Personnel-to-Population Ratios:			
- Alberta	1:11,474	1:9,075	1:8,615

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[1] Sources: "Health and Social Service Personnel Working in Alberta, March 31," 1986, 1987 and 1988 editions, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

IV. Educational Programs

Mount Royal College offers a two-year diploma in recreation therapy. The program produced 32 graduates in 1987-88. In addition, Red Deer College offers a two-year university transfer program leading to a Bachelor of Arts in Recreation Administration. The University of Alberta offers a four-year undergraduate degree and a two-year master's degree in Recreation Administration. Individuals may concentrate their studies in a number of areas including recreation for special populations (Therapeutic Recreation).

TABLE 3
EDUCATIONAL PROGRAMS FOR RECREATIONAL THERAPISTS IN ALBERTA

	1985-86	1986-87	1987-88
A. DIPLOMA PROGRAM[1]			
Mount Royal College			
(Program Length: 2 years)			
Enrolments:[2]			
1st Year	31	89	59
2nd Year	22	39	46
Graduates:	22	24	32
B. BACCALAUREATE PROGRAM[3]			
University of Alberta			
Recreation Administration			
(Therapeutic Recreation Concentration)			
(Program Length: 4 years)			
Enrolments: (all years)	51	52	58
Graduates:	11	13	9
C. MASTER'S PROGRAM[3]			
University of Alberta			
Recreation Administration			
(Therapeutic Recreation Concentration)			
(Program Length: 2 years)			
Enrolments: (both years)	4	4	4
Graduates:	—	—	2

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[1] Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1988.

[2] In 1986-87, the College offered a part-time credit extension program in addition to the regular program. Enrolment data include both programs.

[3] Source: Department of Recreation and Leisure Studies, University of Alberta (Edmonton), May 1989.

Registered Nurses

I. Overview

Definition: A registered nurse and a certified graduate nurse are entitled to apply professional nursing knowledge for the purpose of

(a) promoting, maintaining or restoring health;
(b) preventing illness, injury or disability;
(c) caring for the injured, disabled or incapacitated;
(d) assisting in childbirth;
(e) teaching nursing theory or practice;
(f) caring for the dying;
(g) co-ordinating health care;
(h) engaging in the administration, education, teaching or research required to implement or complement exclusive nursing practice or all or any of the matters referred to in clauses (a) to (g).

(Source: Nursing Profession Act, S.A. 1983, ch.N-14.5)

There were 21,699 active nurses who resided in Alberta and registered with the Alberta Association of Registered Nurses (AARN) in 1988.[1] According to a manpower survey conducted by the Alberta Health and Social Services Disciplines Committee, 16,841 registered nurses were employed as of March 31, 1988.[2] The number of practising registered nurses by specialty is shown in Table 4 of this chapter. Registered nurses located in the Census Metropolitan Areas of Calgary and Edmonton accounted for 68 percent of the total number registered. The provincial registered nurse-to-population ratio was 1:110 in 1988.

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[1] Source: Alberta Association of Registered Nurses. Number of nurses registered with the AARN and residing in Alberta as of September 30, 1988. Excludes inactive, honorary, associate, and retired members.

[2] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1988," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

II. Professional Association and Legislation Information

a) Professional Association/Registration Body:

Alberta Association of Registered Nurses
11620 – 168 Street
Edmonton, Alberta
T5M 4A6

Executive Director: Ms. Yvonne Chapman

Registrar: Ms. Jean Smith

President: Ms. Sharon Snell

President Elect: Ms. Phyllis Giovannetti

b) Legislation:

On January 1, 1984 the Nursing Profession Act replaced the Registered Nurses Act. Subject to certain exemptions, the Nursing Profession Act requires that all nurses practising in Alberta who wish to use the title of "registered nurse" must register with the Alberta Association of Registered Nurses.

The Act gives the Alberta Association of Registered Nurses the authority to register qualified individuals in the appropriate registers, and to grant special permits and temporary permits to others who wish to practise under the Act.

The Act establishes a Practice Review Committee which has the authority to investigate the desirable standards of competence for nursing practice in general and the competence of particular registered nurses or permit holders. Complaints concerning unskilled practice and professional misconduct by registered nurses or permit holders may be investigated by the Professional Conduct Committee. Educational requirements for registration are established by the Universities Coordinating Council. In addition, regulations specify individuals must have completed 1,125 hours or more of satisfactory nursing practice in the five years preceding registration. If this requirement is not met, a refresher course must be completed.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF REGISTERED NURSES, ALBERTA, 1988

Census Division (Major Urban Centre)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	456	57,400	1:126
2 (Lethbridge)	1,025	115,800	1:113
3 (Pincher Creek)	244	35,400	1:145
4 (Hanna)	97	12,300	1:127
5 (Drumheller)	239	38,700	1:162
6 (Calgary excluding CMA)	307	38,058	1:124
7 (Stettler)	275	40,900	1:149
8 (Red Deer)	1,225	119,200	1:97
9 (Rocky Mountain House)	73	16,300	1:223
10 (Camrose)	582	79,100	1:136
11 (Edmonton excluding CMA)	169	30,227	1:179
12 (Bonnyville)	298	45,800	1:154
13 (Whitecourt)	311	55,300	1:178
14 (Hinton)	101	24,800	1:246
15 (Banff)	184	22,900	1:124
16 (Fort McMurray)	359	48,700	1:136
17 (High Level)	195	50,600	1:259
18 (Grande Cache)	61	12,500	1:205
19 (Grande Prairie)	557	72,100	1:129
Census Metropolitan Area (CMA) of Calgary	6,561	693,142[3]	1:106
Census Metropolitan Area (CMA) of Edmonton	8,250	785,673[3]	1:95
Location Unknown	130	—	—
PROVINCIAL TOTAL	**21,699**	**2,395,000**	**1:110**

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[1] Source: Alberta Association of Registered Nurses. Number of nurses registered with the AARN and residing in Alberta as of September 30, 1988. Excludes inactive, honorary, associate, and retired members.

[2] Source: "(Preliminary) Population Estimates by Census Division, Alberta, 1988," Alberta Bureau of Statistics, June 1989.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

TABLE 1B
COMMUNITY BREAKDOWN OF REGISTERED NURSES, ALBERTA, 1988

Community by Population Size	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	6,561	693,142[3]	1:106
Census Metropolitan Area (CMA) of Edmonton	8,250	785,673[3]	1:95
10,000 to 69,999			
Camrose	129	12,968	1:101
Fort McMurray	286	34,949	1:122
Grande Prairie	260	26,648	1:102
Lethbridge	674	60,610	1:90
Lloydminster	48	10,201	1:213
Medicine Hat	401	42,290	1:105
Red Deer	717	54,839	1:76
Wetaskiwin	85	10,103	1:119
5,000 to 9,999			
Bonnyville	61	5,575	1:91
Brooks	76	9,464	1:125
Crowsnest Pass	53	6,912	1:130
Drumheller	60	6,366	1:106
Edson	47	7,323	1:156
High River	74	5,096	1:69
Hinton	47	8,846	1:188
Innisfail	72	5,535	1:77
Lacombe	84	6,110	1:73
Okotoks	51	5,666	1:111
Olds	59	5,004	1:85
Peace River	73	6,355	1:87
Ponoka	142	5,473	1:39
Rocky Mountain House	58	5,261	1:91
Slave Lake	30	5,611	1:187
St. Paul	53	5,128	1:97
Stettler	47	5,147	1:110
Taber	60	6,382	1:106
Vegreville	72	5,276	1:73
Whitecourt	30	6,126	1:204
Under 5,000	2,909	540,921	1:186
Location Unknown	130	—	—
PROVINCIAL TOTAL	**21,699**	**2,395,000[4]**	**1:110**

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[1] Source: Alberta Association of Registered Nurses. Number of nurses registered with the AARN and residing in Alberta as of September 30, 1988. Excludes inactive, honorary, associate, and retired members.

[2] Source: "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[4] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

TABLE 2
SELECTED MANPOWER STATISTICS FOR REGISTERED NURSES IN ALBERTA, 1986, 1987, AND 1988

	1986	1987	1988
Number of Registered Personnel[1]	21,596	21,467	21,699
% Change in Number of Registered Personnel	3.6%	N/A	1.1%
Population (Alberta)[2]	2,375,100	2,377,700	2,395,000
% Change in Population	1.1%	0.1%	0.7%
Personnel-to-Population Ratios:			
– Alberta	1:110	1:111	1:110
– Western Canada[3]	1:114	—	—

IV. Educational Programs

In 1987-88, there were 14 basic education programs which met the training requirements to obtain status as a registered nurse. Of these, two were baccalaureate programs, seven were diploma programs offered in community colleges, four were diploma programs offered in hospitals and one was a diploma program for registered psychiatric nurses. These programs produced a total of 903 graduates (772 from the diploma programs and 131 from the baccalaureate programs) in 1987-88. Table 3A lists the basic education programs, including the supplementary program for psychiatric nurses.

In addition, there were 11 post-basic education programs for registered nurses. Of these, six were specialized studies leading to a certificate, three were post-diploma baccalaureate programs and two were master's degree programs. These programs produced a total of 369 graduates (230 from post-diploma baccalaureate programs, 25 from master's programs and 114 from post-basic certificate programs) in 1987-88. Table 3B lists the post-basic education programs for registered nurses.

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[1] Source: Alberta Association of Registered Nurses. Number of nurses registered with the AARN and residing in Alberta as of September 30 of the indicated year. Excludes inactive, honorary, associate and retired members. Note: The 1987 figure is revised with respect to the 1987 edition of this publication.

[2] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

[3] Source: Ratio for the provinces of Manitoba, Saskatchewan, Alberta and British Columbia combined derived from, **Health Personnel in Canada — 1987**. Ottawa, Ontario: Department of National Health and Welfare, December 1988.

TABLE 3A
EDUCATIONAL PROGRAMS FOR REGISTERED NURSES IN ALBERTA[1]

	1985-86	1986-87	1987-88
A. BACCALAUREATE NURSING PROGRAMS			
University of Alberta			
(Program Length: 4 years)			
Enrolments:			
1st Year	92	99	99
2nd Year	98	83	103
3rd Year	94	85	82
4th Year	60	95	76
Graduates:	60	95	80
University of Calgary			
(Program Length: 4 years)			
Enrolments:			
1st Year	64	64	64
2nd Year	60	64	61
3rd Year	50	57	58
4th Year	52	46	55
Graduates:	52	44	51
PROVINCIAL TOTAL			
Number of Baccalaureate Programs: 2			
Graduates:	112	139	131
B. DIPLOMA NURSING PROGRAMS			
Grande Prairie Regional College			
(Program Length: 88 weeks)			
Enrolments:			
1st Year	28	28	28
2nd Year	20	22	22
Graduates:	14	18	22
Grant MacEwan Community College			
(Program Length: 88 weeks)			
Enrolments:			
1st Year	93	79	82
2nd Year	45	62	60
Graduates:	38	58	58

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[1] Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1988.

TABLE 3A continued
EDUCATIONAL PROGRAMS FOR REGISTERED NURSES IN ALBERTA[1]

	1985-86	1986-87	1987-88
Keyano College (Program Length: 88 weeks)			
Enrolments:			
1st Year	34	29	24
2nd Year	18	18	22
Graduates:	18	15	22
Lethbridge Community College (Program Length: 88 weeks)			
Enrolments:			
1st Year	102	106	105
2nd Year	59	70	72
Graduates:	49	50	64
Medicine Hat College (Program Length: 88 weeks)			
Enrolments:			
1st Year	44	37	38
2nd Year	34	35	24
Graduates:	27	24	21
Mount Royal College (Program Length: 88 weeks)			
Enrolments:			
1st Year	126	116	113
2nd Year	95	103	108
Graduates:	72	83	84
Red Deer College (Program Length: 88 weeks)			
Enrolments:			
1st Year	80	80	79
2nd Year	78	80	67
Graduates:	65	71	60
Foothills Hospital (Program Length: 3 years)			
Enrolments:			
1st Year	150	152	151
2nd Year	122	124	122
3rd Year	117	128	113
Graduates:	104	04	97

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[1] Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1988.

TABLE 3A continued
EDUCATIONAL PROGRAMS FOR REGISTERED NURSES IN ALBERTA[1]

	1985-86	1986-87	1987-88
Misericordia Hospital (Program Length: 3 years)			
Enrolments:			
1st Year	90	90	90
2nd Year	74	83	73
3rd Year	70	67	82
Graduates:	67	62	79
Royal Alexandra Hospital (Program Length: 2 1/3 years)			
Enrolments:			
1st Year	123	121	117
2nd Year	121	109	109
3rd Year	85	103	100
Graduates:	87	103	101
University of Alberta Hospitals (Program Length: 2 1/3 years)			
Enrolments:			
1st Year	181	170	164
2nd Year	152	162	151
3rd Year	142	142	149
Graduates:	140	141	148
PROVINCIAL TOTAL Number of Diploma Programs: 11			
Graduates:	681	729	756
C. SUPPLEMENTARY NURSING DIPLOMA PROGRAMS (FOR REGISTERED PSYCHIATRIC NURSES)			
Grant MacEwan Community College (Program Length: 13 months)			
Enrolments:			
1st Year	21	19	17
Graduates:	20	14	16
B & C PROVINCIAL TOTAL Total Supplementary plus Basic Diploma Programs: 12			
Graduates:	701	743	772

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[1] Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1988.

TABLE 3B
POST-BASIC EDUCATION PROGRAMS FOR REGISTERED NURSES IN ALBERTA[1]

	1985-86	1986-87	1987-88
A. POST-DIPLOMA BACCALAUREATE EDUCATION PROGRAMS			
University of Alberta (Program Length: 2 years)			
Enrolments:			
1st Year	142	118	94
2nd Year	172	255	141
Graduates:	103	118	137
University of Calgary (Program Length: 2 years)			
Enrolments:			
1st Year	50	50	50
2nd Year	34	35	19
Graduates:	51	61	63
University of Lethbridge (Program Length: 2 years)			
Enrolments:			
1st Year	64	87	84
2nd Year	44	28	41
Graduates:	23	29	30
PROVINCIAL TOTAL			
Number of Post-Diploma Baccalaureate Nursing Programs for Diploma Nurses: 3			
Graduates:	177	208	230

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[1] Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1988.

TABLE 3B continued
POST-BASIC EDUCATION PROGRAMS FOR REGISTERED NURSES IN ALBERTA[1]

	1985-86	1986-87	1987-88
B. GRADUATE DEGREE EDUCATION PROGRAMS			
Master of Nursing University of Alberta (Program Length: 2 years)			
Enrolments:			
1st Year	17	19	21
2nd Year	29	38	39
Graduates:	10	8	15
University of Calgary (Program Length: 2 years)			
Enrolments:			
1st Year	20	26	21
2nd Year	9	17	35
Graduates:	7	10	10
PROVINCIAL TOTAL			
Number of Master of Nursing Programs: 2			
Graduates:	17	18	25
C. CERTIFICATE EDUCATION PROGRAMS			
Emergency Intensive Care Certificate Misericordia Hospital School of Nursing (Program Length: 16 weeks)			
Enrolments:			
1st year	36	32	32
Graduates:	33	30	27
Extended Care Nursing Grant MacEwan Community College (Program Length: 1 year)			
Enrolments:			
1st year	25	31	30
Graduates:	30	11	34
Mental Health Nursing Mount Royal College (Program Length: 10 months full-time 2 1/2 years part-time)			
Enrolments:			
1st year	41	50	41
Graduates:	7	3	13

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[1] Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1988.

TABLE 3B continued
POST-BASIC EDUCATION PROGRAMS FOR REGISTERED NURSES IN ALBERTA[1]

	1985-86	1986-87	1987-88
Neonatal Intensive Care Nursing Education Foothills Hospital School of Nursing (Program Length: variable)			
Enrolments:			
1st year	24	29	19
Graduates:	18	24	14
Occupational Health Nursing Grant MacEwan Community College (Program Length: 1 year)			
Enrolments:			
1st year	45	27	32
Graduates:	40	31	5
Introduction to Operating Room Nursing[2] University of Alberta Hospitals (Program Length: 12 weeks)			
Enrolments:	—	—	21
Graduates:	—	—	21
PROVINCIAL TOTAL Number of Post-Basic Certificate Programs: 6			
Graduates:	128	99	114
PROVINCIAL TOTAL Number of Post-Basic Education Programs: 11			
Graduates:	322	325	369

Refresher Programs:

In 1987-88, eleven institutions (Alberta Vocational Centre — Lac La Biche, Foothills Hospital, Grande Prairie Regional College, Grant MacEwan Community College, Keyano College, Lakeland College, Lethbridge Community College, Misericordia Hospital, Olds College, Red Deer College, and University of Alberta Hospitals) offered refresher courses in nursing for individuals returning to practise or those requiring upgrading of credentials to meet registration requirements. In the 1987-88 academic year, 511 students were enrolled in these programs and 407 graduated.

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[1] Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1988.

[2] This program commenced in 1987-88.

TABLE 4
PRACTISING NURSES BY SPECIALTY AND PERSONNEL-TO-POPULATION RATIOS BY SPECIALTY, ALBERTA, 1988

Specialty	Number of Practising Nurses[1]	Personnel-to-Population Ratio[2]
Administrative	1,565	1:1,530
Community/Public Health	753	1:3,181
Emergency Room	547	1:4,378
Home Care	482	1:4,969
Intensive Care Units (C.C.U., I.C.U., Burn)	1,133	1:2,114
Intravenous Therapy	53	1:45,189
Labor Delivery/Recovery Suite	335	1:7,149
Long Term Care/Rehabilitation	1,850	1:1,295
Maternal/Child	527	1:4,545
Medical/Surgical	3,831	1:625
Nursing Education	859	1:2,788
Occupational/Staff Health	393	1:6,094
Operating Room	622	1:3,850
Out-Patient Services	242	1:9,897
Pediatrics	448	1:5,346
Physicians' Offices, Medical or School Clinics	623	1:3,844
Psychiatric Wards	615	1:3,894
Recovery Room	135	1:17,741
Short Stay Unit	122	1:19,631
Specialty Total	15,135	1:158
General Duty and Other Areas	1,852	1:1,293
GRAND TOTAL	**16,987**[3]	**1:141**

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1988," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: Ratios calculated using a provincial population of 2,395,000 as taken from "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

[3] The total number of personnel in Table 4 is less than the total number of personnel in Tables 1A and 1B. This table shows the number of practising personnel as of March 31, 1988 whereas Tables 1A and 1B show the number of active nurses who were registered with the Alberta Association of Registered Nurses as of September 30, 1988.

Registered Nursing Assistants

I. Overview

Definition: Provide nursing care for patients in hospitals, nursing homes, clinics and similar establishments. Take and record blood pressure, temperature, pulse and respiration rates. Apply dressings and administer injections, medications and treatments under supervision. Report and record observations and symptoms indicative of change in condition of patients. Assist with admission and discharge of patients. Bathe patients, make beds and assist with rehabilitation procedures. Feed and assist patients in feeding themselves. Answer call-bells and patients' or visitors' inquiries and perform other bedside services. Perform duties in operating room, outpatients and other specialized areas, if required.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

In Alberta, only nursing assistants who have received supplementary training in the administration of medicine are permitted to administer oral medications other than narcotics. Nursing assistants are not permitted to give injections.

In 1977, certified nursing aides and registered nursing orderlies were re-named registered nursing assistants in accordance with the Nursing Assistants Registration Act of 1976.

There were 7,225 nursing assistants who resided in Alberta and registered with the Professional Council of Registered Nursing Assistants (PCRNA) in 1988.[1] According to a manpower survey conducted by the Alberta Health and Social Services Disciplines Committee, there were 4,102 registered nursing assistants employed as of March 31, 1988.[2] Based on registration data however, the registered nursing assistant-to-population ratio was 1:331 in Alberta in 1988.

II. Professional Association and Legislation Information

a) Licensing, Registration or Certification Authority:

Professional Council of Registered Nursing Assistants
10604 – 170 Street
Edmonton, Alberta
T5S 1P3

Executive Director/Registrar: Ms. Pat Fredrickson

President: Ms. Marie Cornelson

b) Legislation:

Since January 1, 1987, nursing assistants have been regulated under the Health Disciplines Act. Under this Act, the Professional Council of Registered Nursing Assistants is designated as the body responsible for registration and professional conduct of its members. The Health Disciplines Board is responsible for setting educational qualifications for registration purposes. Under the authority of the Health Disciplines Act, all individuals who wish to use the title "registered nursing assistant" or "registered nursing orderly" must register with the Council.

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[1] Source: Professional Council of Registered Nursing Assistants. Number of nursing assistants registered with the PCRNA and residing in Alberta as of December 31, 1988.

[2] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1988," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF REGISTERED NURSING ASSISTANTS, ALBERTA, 1988

Census Division (Major Urban Centre)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	167	57,400	1:344
2 (Lethbridge)	331	115,800	1:350
3 (Pincher Creek)	168	35,400	1:211
4 (Hanna)	89	12,300	1:138
5 (Drumheller)	136	38,700	1:285
6 (Calgary excluding CMA)	184	38,058	1:207
7 (Stettler)	229	40,900	1:179
8 (Red Deer)	352	119,200	1:339
9 (Rocky Mountain House)	38	16,300	1:429
10 (Camrose)	323	79,100	1:245
11 (Edmonton excluding CMA)	98	30,227	1:308
12 (Bonnyville)	159	45,800	1:288
13 (Whitecourt)	197	55,300	1:281
14 (Hinton)	58	24,800	1:428
15 (Banff)	92	22,900	1:249
16 (Fort McMurray)	51	48,700	1:955
17 (High Level)	129	50,600	1:392
18 (Grande Cache)	40	12,500	1:313
19 (Grande Prairie)	336	72,100	1:215
Census Metropolitan Area (CMA) of Calgary	1,383	693,142[3]	1:501
Census Metropolitan Area (CMA) of Edmonton	2,316	785,673[3]	1:339
Location Unknown	349	—	—
PROVINCIAL TOTAL	**7,225**	**2,395,000**	**1:331**

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[1] Source: Professional Council of Registered Nursing Assistants. Number of nursing assistants registered with the PCRNA and residing in Alberta as of December 31, 1988.

[2] Source: "(Preliminary) Population Estimates by Census Division, Alberta, 1988," Alberta Bureau of Statistics, June 1989.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

TABLE 1B
COMMUNITY BREAKDOWN OF REGISTERED NURSING ASSISTANTS, ALBERTA, 1988

Community by Population Size	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	1,383	693,142[3]	1:501
Census Metropolitan Area (CMA) of Edmonton	2,316	785,673[3]	1:339
10,000 to 69,999			
Camrose	57	12,968	1:228
Fort McMurray	20	34,949	1:1,747
Grande Prairie	115	26,648	1:232
Lethbridge	168	60,610	1:361
Lloydminster	14	10,201	1:729
Medicine Hat	134	42,290	1:316
Red Deer	150	54,839	1:366
Wetaskiwin	52	10,103	1:194
5,000 to 9,999			
Bonnyville	30	5,575	1:186
Brooks	43	9,464	1:220
Crowsnest Pass	52	6,912	1:133
Drumheller	27	6,366	1:236
Edson	26	7,323	1:282
High River	37	5,096	1:138
Hinton	20	8,846	1:442
Innisfail	43	5,535	1:129
Lacombe	19	6,110	1:322
Okotoks	17	5,666	1:333
Olds	42	5,004	1:119
Peace River	36	6,355	1:177
Ponoka	43	5,473	1:127
Rocky Mountain House	34	5,261	1:155
Slave Lake	20	5,611	1:281
St. Paul	34	5,128	1:151
Stettler	48	5,147	1:107
Taber	28	6,382	1:228
Vegreville	29	5,276	1:182
Whitecourt	18	6,126	1:340
Under 5,000	1,821	540,921	1:297
Location Unknown	349	—	—
PROVINCIAL TOTAL	**7,225**	**2,395,000[4]**	**1:331**

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[1] Source: Professional Council of Registered Nursing Assistants. Number of nursing assistants registered with the PCRNA and residing in Alberta as of December 31, 1988.

[2] Source: "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[4] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

TABLE 2
SELECTED MANPOWER STATISTICS FOR REGISTERED NURSING ASSISTANTS IN ALBERTA, 1986, 1987, AND 1988

	1986	1987	1988
Number of Registered Personnel	7,864[1]	7,414[2]	7,225[2]
% Change in Number of Registered Personnel	2.9%	N/A	-2.5%
Population (Alberta)[3]	2,375,100	2,377,700	2,395,000
% Change in Population	1.1%	0.1%	0.7%
Personnel-to-Population Ratios:			
– Alberta	1:302	1:321	1:331

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[1] Source: Alberta Nursing Assistants Registration Board. Number of nursing assistants registered with the Board and residing in Alberta as of December 31, 1986.

[2] Source: Professional Council of Registered Nursing Assistants. Number of nursing assistants registered with the PCRNA and residing in Alberta as of December 31 of the indicated year.

[3] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

IV. Educational Programs

The Alberta Vocational Centres (AVC) in Calgary and Edmonton offer a nursing assistant certificate program which is approximately 10 months in length. The Calgary program includes off-campus instruction at Crowsnest Pass, Drumheller and Claresholm; the Edmonton program is brokered at AVC — Grouard. In 1987-88, there were 179 graduates from these programs.

A six-month nursing assistant refresher program is offered at both AVC — Calgary and AVC — Edmonton. There were 34 graduates in 1987-88 from the two programs.[1]

In addition to the basic and refresher programs, a post-basic course, "Administration of Oral Medications" is being offered through AVC— Edmonton. This is a distance delivery course of 9 to 11 weeks in length designed as part-time study for individuals who are presently employed. This course was offered as a pilot project in 1986. In 1988, there were 222 nursing assistants who completed this program.[2]

Another specialist course, "Working with the Aged" commenced in September 1988. A total of 47 students was enrolled in this course in 1988.[3]

TABLE 3
EDUCATIONAL PROGRAMS FOR
NURSING ASSISTANTS IN ALBERTA[4]

	1985-86	1986-87	1987-88
CERTIFICATE PROGRAM			
Alberta Vocational Centre — Calgary[5] (Program Length: 38 weeks)			
Enrolments:	196	166	129
Graduates:	122	111	80
Alberta Vocational Centre — Edmonton[6] (Program Length: 38 weeks)			
Enrolments:	207	200	140
Graduates:	142	154	99
PROVINCIAL TOTAL			
Number of Certificate Programs: 2			
Graduates:	264	265	179

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[1] Source: Professional Council of Registered Nursing Assistants, May 1989.

[2] Ibid.

[3] Ibid.

[4] Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1988.

[5] This program is also offered at the Chinook and Big Country Educational Consortia.

[6] This program is also brokered at AVC — Grouard.

Rehabilitation Practitioners

I. Overview

Definition: Rehabilitation practitioners work in the provision of rehabilitation programs to the developmentally handicapped in a community or institutional setting. These workers are normally responsible for the delivery of established care and developmental programs based on client's needs in the areas of residence, family support, vocation, social education, recreation/leisure or developmental day care.

(Source: Alberta Family and Social Services)

Since registration with the Alberta Association of Rehabilitation Practitioners is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1988 by the Alberta Health and Social Services Disciplines Committee, was used as the source of manpower information.

There were 1,350 rehabilitation practitioners practising in Alberta in 1988.[1] Rehabilitation practitioners employed in the Census Metropolitan Areas of Calgary and Edmonton accounted for 58 percent of the total. Another 22 percent were located in Census Division 8 (Red Deer) where Michener Centre, the province's largest institution for the developmentally handicapped, is located. The provincial rehabilitation practitioner-to-population ratio was 1:1,774 in 1988.

II. Professional Association and Legislation Information

a) Licensing, Registration or Certification Authority:

None.

b) Professional Association:

Alberta Association of Rehabilitation Practitioners
P.O. Box 887
Red Deer, Alberta
T4N 1K3

President: Ms. Shauna Byar

c) Legislation:

Rehabilitation practitioners have been designated to be regulated under the Health Disciplines Act; a Rehabilitation Practitioners Committee was established under this Act. Currently the government is re-evaluating the need to regulate this discipline.

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1988," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF PRACTISING REHABILITATION PRACTITIONERS, ALBERTA, 1988

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	38	57,400	1:1,511
2 (Lethbridge)	49	115,800	1:2,363
3 (Pincher Creek)	0	35,400	—
4 (Hanna)	4	12,300	1:3,075
5 (Drumheller)	16	38,700	1:2,419
6 (Calgary excluding CMA)	16	38,058	1:2,379
7 (Stettler)	10	40,900	1:4,090
8 (Red Deer)	294	119,200	1:405
9 (Rocky Mountain House)	2	16,300	1:8,150
10 (Camrose)	65	79,100	1:1,217
11 (Edmonton excluding CMA)	3	30,227	1:10,076
12 (Bonnyville)	0	45,800	—
13 (Whitecourt)	14	55,300	1:3,950
14 (Hinton)	3	24,800	1:8,267
15 (Banff)	10	22,900	1:2,290
16 (Fort McMurray)	5	48,700	1:9,740
17 (High Level)	0	50,600	—
18 (Grande Cache)	0	12,500	—
19 (Grande Prairie)	33	72,100	1:2,185
Census Metropolitan Area (CMA) of Calgary	302	693,142[3]	1:2,295
Census Metropolitan Area (CMA) of Edmonton	486	785,673[3]	1:1,617
PROVINCIAL TOTAL	**1,350**	**2,395,000**	**1:1,774**

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1988," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "(Preliminary) Population Estimates by Census Division, Alberta, 1988," Alberta Bureau of Statistics, June 1989.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

TABLE 1B
COMMUNITY BREAKDOWN OF PRACTISING REHABILITATION PRACTITIONERS, ALBERTA, 1988

Community by Population Size	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	302	693,142[3]	1:2,295
Census Metropolitan Area (CMA) of Edmonton	486	785,673[3]	1:1,617
10,000 to 69,999			
Camrose	21	12,968	1:618
Fort McMurray	2	34,949	1:17,475
Grande Prairie	31	26,648	1:860
Lethbridge	49	60,610	1:1,237
Lloydminster	17	10,201	1:600
Medicine Hat	38	42,290	1:1,113
Red Deer	283	54,839	1:194
Wetaskiwin	3	10,103	1:3,368
5,000 to 9,999			
Bonnyville	0	5,575	—
Brooks	0	9,464	—
Crowsnest Pass	0	6,912	—
Drumheller	16	6,366	1:398
Edson	3	7,323	1:2,441
High River	0	5,096	—
Hinton	0	8,846	—
Innisfail	7	5,535	1:791
Lacombe	3	6,110	1:2,037
Okotoks	0	5,666	—
Olds	16	5,004	1:313
Peace River	2	6,355	1:3,178
Ponoka	1	5,473	1:5,473
Rocky Mountain House	2	5,261	1:2,631
Slave Lake	0	5,611	—
St. Paul	0	5,128	—
Stettler	0	5,147	—
Taber	0	6,382	—
Vegreville	16	5,276	1:330
Whitecourt	0	6,126	—
Under 5,000	52	540,921	1:10,402
PROVINCIAL TOTAL	**1,350**	**2,395,000[4]**	**1:1,774**

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1988," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[4] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

TABLE 2
SELECTED MANPOWER STATISTICS FOR REHABILITATION PRACTITIONERS IN ALBERTA, 1986, 1987, AND 1988

	1986	1987	1988
Number of Practising Personnel[1]	1,223	1,548	1,350
% Change in Number of Practising Personnel	0.9%	26.6%	-12.8%
Population (Alberta)[2]	2,375,100	2,377,700	2,395,000
% Change in Population	1.1%	0.1%	0.7%
Personnel-to-Population Ratios:			
– Alberta	1:1,942	1:1,536	1:1,774

IV. Educational Programs

Training in rehabilitative services is offered in one-year certificate programs, two-year diploma programs, and a four-year baccalaureate program. Alberta Vocational Centre — Lac La Biche, Grande Prairie Regional College and Medicine Hat College offer certificate programs of approximately one year in length. The diploma programs are offered at Grant MacEwan Community College, Lethbridge Community College, Mount Royal College and Red Deer College; the baccalaureate program is offered at the University of Calgary.

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[1] Sources: "Health and Social Service Personnel Working in Alberta, March 31," 1986, 1987 and 1988 editions, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

TABLE 3
EDUCATIONAL PROGRAMS FOR REHABILITATION PRACTITIONERS IN ALBERTA[1]

	1985-86	1986-87	1987-88
A. CERTIFICATE PROGRAMS IN REHABILITATIVE SERVICES			
Alberta Vocational Centre — Lac La Biche (Program Length: 36 weeks)			
Enrolments:			
1st Year	12	12	15
Graduates:	9	8	10
Grande Prairie Regional College (Program Length: 44 weeks)			
Enrolments:[2]			
1st Year	—	19	21
Graduates:	—	7	11
Medicine Hat College (Program Length: 1 year)			
Enrolments:			
1st Year	30	32	23
Graduates:	7	11	9
B. DIPLOMA PROGRAMS IN REHABILITATIVE SERVICES			
Grant MacEwan Community College (Program Length: 2 years)			
Enrolments:			
1st Year	147	37	102
2nd Year	50	39	28
Graduates:	48	39	28
Lethbridge Community College (Program Length: 2 years)			
Enrolments:			
1st Year	36	32	28
2nd Year	21	28	25
Graduates:	16	13	8
Mount Royal College (Program Length: 2 years)			
Enrolments:			
1st Year	72	64	56
2nd Year	48	50	54
Graduates:	37	39	30

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[1] Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1988.

[2] This program commenced in 1986-87.

TABLE 3 continued
EDUCATIONAL PROGRAMS FOR REHABILITATION PRACTITIONERS IN ALBERTA[1]

	1985-86	1986-87	1987-88
Red Deer College (Program Length: 2 years)			
Enrolments:			
1st Year	52	49	52
2nd Year	44	35	34
Graduates:	36	29	24
C. BACCALAUREATE PROGRAM IN REHABILITATION EDUCATION[2]			
University of Calgary (Program Length: 4 years)			
Enrolments:			
1st Year	4	6	4
2nd, 3rd and 4th Years Combined	—	—	5
Graduates:	1	1	1
PROVINCIAL TOTAL			
Number of Certificate Training Programs: 3			
Graduates:	16	26	30
Number of Diploma Training Programs: 4			
Graduates:	137	120	90
Number of Baccalaureate Training Programs: 1			
Graduates:	1	1	1

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[1] Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1988.

[2] Alberta Department of Advanced Education. Number of students enrolled in and graduated from Rehabilitation Education program (University of Calgary), 1985-86 through 1987-88.

Respiratory Therapists

I. Overview

Definition: Administer respiratory therapy to patients in hospital or at home. Discuss patient's treatment with medical and nursing staff. Set up ventilators, incubators, manual resuscitators and other life support equipment. Attach life support equipment to patient. Operate controls of equipment to adjust airway pressure, humidity, blood gas levels, respiratory rate and other factors. Monitor patient's progress and equipment function. Perform basic pulmonary function tests to assist physician in diagnosis of respiratory illnesses. Take blood sample from patient and analyze for blood gas values, if required. Explain treatment procedures and demonstrate equipment operation to patients and hospital personnel. Perform artificial respiration and external cardiac massage, if required. Service and repair equipment and inspect all medical piping, manifolds and patient alarm system.

(Source: **Canadian Classification and Dictionary of Occupations.** Ottawa Ontario: Employment and Immigration Canada, 1980)

Respiratory therapists have been regulated under the Health Disciplines Act since 1986. Registration data obtained from the Respiratory Therapists Committee under the Health Disciplines Board is used as the source for information on manpower supply.

There were 478 respiratory therapists registered with the Respiratory Therapists Committee in 1988.[1] Respiratory therapists in the Census Metropolitan Areas of Calgary and Edmonton accounted for 81 percent of the total. The provincial personnel-to-population ratio was 1:5,010 in 1988.

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[1] Source: Respiratory Therapists Committee, Alberta Health Disciplines Board. Number of respiratory therapists registered with the Committee and residing in Alberta as of December 31, 1988.

II. Professional Association and Legislation Information

a) Licensing, Registration or Certification Authority:

Respiratory Therapists Committee
c/o Professions and Occupations Bureau
5th Floor, Kensington Place
10011 – 109 Street
Edmonton, Alberta
T5J 3S8

Chairman: Ms. Mary Rehill

b) Professional Association:

Alberta Society of Respiratory Therapists
907 – 18 Avenue, N.W.
Calgary, Alberta
T2M 0V6

President: Mr. Brian Buell

c) Legislation:

Respiratory therapists have been regulated under the Health Disciplines Act since March 31, 1986. The Respiratory Therapists Committee and the Health Disciplines Board are responsible for registration and discipline of practitioners. Educational qualifications have been set by the Board in regulation.

The titles "registered respiratory therapist" and "registered respiratory technologist" are reserved by regulation for registered members.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF REGISTERED RESPIRATORY THERAPISTS, ALBERTA, 1988

Census Division (Major Urban Centre)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	9	57,400	1:6,378
2 (Lethbridge)	16	115,800	1:7,238
3 (Pincher Creek)	2	35,400	1:17,700
4 (Hanna)	0	12,300	—
5 (Drumheller)	1	38,700	1:38,700
6 (Calgary excluding CMA)	4	38,058	1:9,515
7 (Stettler)	0	40,900	—
8 (Red Deer)	21	119,200	1:5,676
9 (Rocky Mountain House)	0	16,300	—
10 (Camrose)	6	79,100	1:13,183
11 (Edmonton excluding CMA)	0	30,227	—
12 (Bonnyville)	3	45,800	1:15,267
13 (Whitecourt)	5	55,300	1:11,060
14 (Hinton)	0	24,800	—
15 (Banff)	1	22,900	1:22,900
16 (Fort McMurray)	3	48,700	1:16,233
17 (High Level)	0	50,600	—
18 (Grande Cache)	0	12,500	—
19 (Grande Prairie)	5	72,100	1:14,420
Census Metropolitan Area (CMA) of Calgary	154	693,142[3]	1:4,501
Census Metropolitan Area (CMA) of Edmonton	235	785,673[3]	1:3,343
Location Unknown	13	—	—
PROVINCIAL TOTAL	**478**	**2,395,000**	**1:5,010**

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[1] Source: Respiratory Therapists Committee, Alberta Health Disciplines Board. Number of respiratory therapists registered with the Committee and residing in Alberta as of December 31, 1988.

[2] Source: "(Preliminary) Population Estimates by Census Division, Alberta, 1988," Alberta Bureau of Statistics, June 1989.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

TABLE 1B
COMMUNITY BREAKDOWN OF REGISTERED RESPIRATORY THERAPISTS, ALBERTA, 1988

Community by Population Size	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	154	693,142[3]	1:4,501
Census Metropolitan Area (CMA) of Edmonton	235	785,673[3]	1:3,343
10,000 to 69,999			
Camrose	4	12,968	1:3,242
Fort McMurray	3	34,949	1:11,650
Grande Prairie	4	26,648	1:6,662
Lethbridge	15	60,610	1:4,041
Lloydminster	0	10,201	—
Medicine Hat	9	42,290	1:4,699
Red Deer	15	54,839	1:3,656
Wetaskiwin	0	10,103	—
5,000 to 9,999			
Bonnyville	0	5,575	—
Brooks	0	9,464	—
Crowsnest Pass	1	6,912	1:6,912
Drumheller	0	6,366	—
Edson	0	7,323	—
High River	1	5,096	1:5,096
Hinton	0	8,846	—
Innisfail	0	5,535	—
Lacombe	1	6,110	1:6,110
Okotoks	2	5,666	1:2,833
Olds	0	5,004	—
Peace River	0	6,355	—
Ponoka	0	5,473	—
Rocky Mountain House	0	5,261	—
Slave Lake	0	5,611	—
St. Paul	3	5,128	1:1,709
Stettler	0	5,147	—
Taber	1	6,382	1:6,382
Vegreville	0	5,276	—
Whitecourt	0	6,126	—
Under 5,000	17	540,921	1:31,819
Location Unknown	13	—	—
PROVINCIAL TOTAL	**478**	**2,395,000[4]**	**1:5,010**

---

[1] Source: Respiratory Therapists Committee, Alberta Health Disciplines Board. Number of respiratory therapists registered with the Committee and residing in Alberta as of December 31, 1988.

[2] Source: "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[4] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

TABLE 2
SELECTED MANPOWER STATISTICS FOR RESPIRATORY THERAPISTS IN ALBERTA, 1986, 1987, AND 1988

	1986	1987	1988
Number of Registered Personnel[1]	397	457	478
% Change in Number of Registered Personnel	N/A	15.1%	4.6%
Population (Alberta)[2]	2,375,100	2,377,700	2,395,000
% Change in Population	1.1%	0.1%	0.7%
Personnel-to-Population Ratios:			
– Alberta	1:5,983	1:5,203	1:5,010

IV. Educational Programs

The Northern Alberta Institute of Technology and the Southern Alberta Institute of Technology each offer a two-year respiratory therapy diploma program. There were 60 graduates from the two programs in 1987-88.

TABLE 3
EDUCATIONAL PROGRAMS FOR RESPIRATORY THERAPISTS IN ALBERTA[3]

	1985-86	1986-87	1987-88
DIPLOMA PROGRAM IN RESPIRATORY THERAPY			
Northern Alberta Institute of Technology (Program Length: 2 years)			
Enrolments:			
1st Year	43	43	41
2nd Year	32	32	38
Graduates:	30	30	35
Southern Alberta Institute of Technology (Program Length: 2 years)			
Enrolments:			
1st Year	27	29	26
2nd Year	27	27	29
Graduates:	19	21	25
PROVINCIAL TOTAL			
Number of Training Programs: 2			
Graduates:	49	51	60

---

[1] Source: Respiratory Therapists Committee, Alberta Health Disciplines Board. Number of respiratory therapists registered with the Committee and residing in Alberta as of December 31 of the indicated year.

[2] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

[3] Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1988.

Social Workers

I. Overview

Definition: Counsel and aid individuals and families to understand and resolve their personal and social problems. Interview clients with problems, such as personal, social and family adjustments, finances, employment, and physical and mental impairments, to determine nature, extent and causes of problems. Secure information, such as social, economic, environmental, medical and psychological factors, contributing to client's situation. Evaluate information obtained and assess client's capacities. Determine type of assistance required, counsel client regarding plans for meeting needs, and assist client to mobilize his inner capacities and environmental resources to improve social functioning. Aid client, through casework methods, to modify attitudes and patterns of behaviour by increasing understanding of himself, his problems and his part in creating them. Refer client to community agencies and other organizations and arrange for provision of appropriate assistance, such as financial aid, employment, vocational training, medical treatment, recreational opportunities or housing. Follow progress of client after immediate problems have been overcome, and compile case records and prepare reports. May secure supplementary information such as employment, police or medical records, or school reports. May work in collaboration with professionals in other disciplines.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

As of December 31, 1988 the Alberta Association of Social Workers had 1,129 registered members of which 960 resided in Alberta and had full practice rights.[1] Since membership in the Association is not mandatory, the survey of health and social service personnel working in Alberta conducted on March 31, 1988 by the Alberta Health and Social Services Disciplines Committee, was used as an alternative source of manpower information.

The survey found that there were 2,585 social workers practising in Alberta in 1988.[2] Social workers employed in the Census Metropolitan Areas of Calgary and Edmonton accounted for 68 percent of those employed. The provincial social worker-to-population ratio was 1:926 in 1988.

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[1] Source: Alberta Association of Social Workers. Number of registered members as of December 31, 1988.

[2] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1988," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

II. Professional Association and Legislation Information

a) Professional Association/Registration Body:

Alberta Association of Social Workers
#100, 11831 – 123 Street
Edmonton, Alberta
T5L 0G7

President: Ms. Margaret Dewhurst

b) Legislation:

Under the authority of the Social Workers Act, all individuals who wish to use the title of "registered social worker" must register with the Alberta Association of Social Workers (AASW). However, registration is not mandatory in order to practise in the province. In addition to registration responsibilities, the Association has the power to discipline its members. The Universities Coordinating Council evaluates academic qualifications of applicants trained outside of Alberta and sets examinations for registration purposes.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF PRACTISING SOCIAL WORKERS, ALBERTA, 1988

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	42	57,400	1:1,367
2 (Lethbridge)	128	115,800	1:905
3 (Pincher Creek)	10	35,400	1:3,540
4 (Hanna)	4	12,300	1:3,075
5 (Drumheller)	16	38,700	1:2,419
6 (Calgary excluding CMA)	16	38,058	1:2,379
7 (Stettler)	13	40,900	1:3,146
8 (Red Deer)	137	119,200	1:870
9 (Rocky Mountain House)	16	16,300	1:1,019
10 (Camrose)	51	79,100	1:1,551
11 (Edmonton excluding CMA)	18	30,227	1:1,679
12 (Bonnyville)	41	45,800	1:1,117
13 (Whitecourt)	38	55,300	1:1,455
14 (Hinton)	22	24,800	1:1,127
15 (Banff)	14	22,900	1:1,636
16 (Fort McMurray)	56	48,700	1:870
17 (High Level)	79	50,600	1:641
18 (Grande Cache)	3	12,500	1:4,167
19 (Grande Prairie)	113	72,100	1:638
Census Metropolitan Area (CMA) of Calgary	752	693,142[3]	1:922
Census Metropolitan Area (CMA) of Edmonton	1,016	785,673[3]	1:773
PROVINCIAL TOTAL	**2,585**	**2,395,000**	**1:926**

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1988," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "(Preliminary) Population Estimates by Census Division, Alberta, 1988," Alberta Bureau of Statistics, June 1989.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

TABLE 1B
COMMUNITY BREAKDOWN OF PRACTISING SOCIAL WORKERS, ALBERTA, 1988

Community by Population Size	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	752	693,142[3]	1:922
Census Metropolitan Area (CMA) of Edmonton	1,016	785,673[3]	1:773
10,000 to 69,999			
Camrose	19	12,968	1:683
Fort McMurray	27	34,949	1:1,294
Grande Prairie	73	26,648	1:365
Lethbridge	105	60,610	1:577
Lloydminster	16	10,201	1:638
Medicine Hat	42	42,290	1:1,007
Red Deer	92	54,839	1:596
Wetaskiwin	18	10,103	1:561
5,000 to 9,999			
Bonnyville	19	5,575	1:293
Brooks	7	9,464	1:1,352
Crowsnest Pass	6	6,912	1:1,152
Drumheller	10	6,366	1:637
Edson	8	7,323	1:915
High River	4	5,096	1:1,274
Hinton	14	8,846	1:632
Innisfail	9	5,535	1:615
Lacombe	4	6,110	1:1,528
Okotoks	0	5,666	—
Olds	12	5,004	1:417
Peace River	34	6,355	1:187
Ponoka	19	5,473	1:288
Rocky Mountain House	16	5,261	1:329
Slave Lake	15	5,611	1:374
St. Paul	16	5,128	1:321
Stettler	5	5,147	1:1,029
Taber	10	6,382	1:638
Vegreville	13	5,276	1:406
Whitecourt	12	6,126	1:511
Under 5,000	192	540,921	1:2,817
PROVINCIAL TOTAL	**2,585**	**2,395,000[4]**	**1:926**

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[1] Source: "Health and Social Service Personnel Working in Alberta, March 31, 1988," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[3] Source: Derived from "Official Population List — 1988," Municipal Services Branch, Alberta Municipal Affairs, September 1988.

[4] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

TABLE 2
SELECTED MANPOWER STATISTICS FOR SOCIAL WORKERS IN ALBERTA, 1986, 1987, AND 1988

	1986	1987	1988
Number of Practising Personnel[1]	2,154	2,443	2,585
% Change in Number of Practising Personnel	-5.9%	13.4%	5.8%
Population (Alberta)[2]	2,375,100	2,377,700	2,395,000
% Change in Population	1.1%	0.1%	0.7%
Personnel-to-Population Ratios:			
– Alberta	1:1,103	1:973	1:926

IV. Educational Programs

The University of Calgary offers both a four-year Bachelor of Social Work (BSW) program and a (12-18)-month Master of Social Work (MSW) program. In 1987-88, the BSW and MSW programs produced 149 and 46 graduates, respectively.

Divisions of the Faculty of Social Welfare of the University of Calgary are located in Edmonton and in Lethbridge. Both the Edmonton and Lethbridge Divisions offer the full first professional degree (Bachelor of Social Work). Social work courses are offered in various locations throughout the province, either through on-site faculty instruction or through the University of Calgary teleconferencing network.

In addition, there are diploma programs in social services available at Grant MacEwan Community College, Mount Royal College, and Red Deer College. These programs produced a total of 193 graduates in 1987-88. There is also a community social service diploma offered by Alberta Vocational Centre — Lac La Biche. This program produced 16 graduates in 1987-88.

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[1] Sources: "Health and Social Service Personnel Working in Alberta, March 31," 1986, 1987 and 1988 editions, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

[2] Source: "Alberta Population Growth, First Quarter, 1989," Alberta Bureau of Statistics, June 1989.

TABLE 3
EDUCATIONAL PROGRAMS FOR SOCIAL WORKERS IN ALBERTA[1]

	1985-86	1986-87	1987-88
A. SOCIAL SERVICE DIPLOMA PROGRAMS			
Grant MacEwan Community College			
(Program Length: 2 years)			
Enrolments:[2]			
1st Year	140	145	145
2nd Year	95	114	150
Graduates:	71	82	101
Mount Royal College			
(Program Length: 2 years)			
Enrolments:			
1st Year	122	145	137
2nd Year	73	81	94
Graduates:	60	65	67
Red Deer College			
(Program Length: 2 years)			
Enrolments:			
1st Year	40	30	30
2nd Year	24	22	31
Graduates:	24	22	25
B. COMMUNITY SOCIAL SERVICE DIPLOMA			
Alberta Vocational Centre — Lac La Biche			
(Program Length: 2 years)			
Enrolments:[2]			
1st Year	36	18	15
2nd Year	11	9	9
Graduates:	28	18	16
PROVINCIAL TOTAL			
Number of Diploma Training Programs: 4			
Graduates:	183	187	209

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[1] Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1988.

[2] Enrolment data includes figures for the Slave Lake outreach program.

TABLE 3 continued
EDUCATIONAL PROGRAMS FOR SOCIAL WORKERS IN ALBERTA[1]

	1985-86	1986-87	1987-88
C. BACCALAUREATE PROGRAM			
University of Calgary Bachelor of Social Work (Program Length: 4 years)			
Enrolments:[2]			
1st Year	9	14	2
2nd Year	76	68	60
3rd Year	193	207	200
4th Year	154	152	117
Graduates:	158	144	149
D. MASTER'S PROGRAM			
University of Calgary Master of Social Work (Program Length: 12-18 months)[3]			
Enrolments:			
1st Year	59	44	49
Graduates:	31	49	46

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[1] Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1988.

[2] The Faculty of Social Welfare admits students from other faculties into the third year of the BSW program. This accounts for the discrepancy between the enrolment figures for the second year and the third year of the program.

[3] The MSW program is one year in length following a BSW degree. Students with an undergraduate degree other than a BSW degree may be admitted to a two-year program.